

Virtual Simulated Patient Resource

Project Lead – Monica Peddle Lecturer
School of Nursing La Trobe University

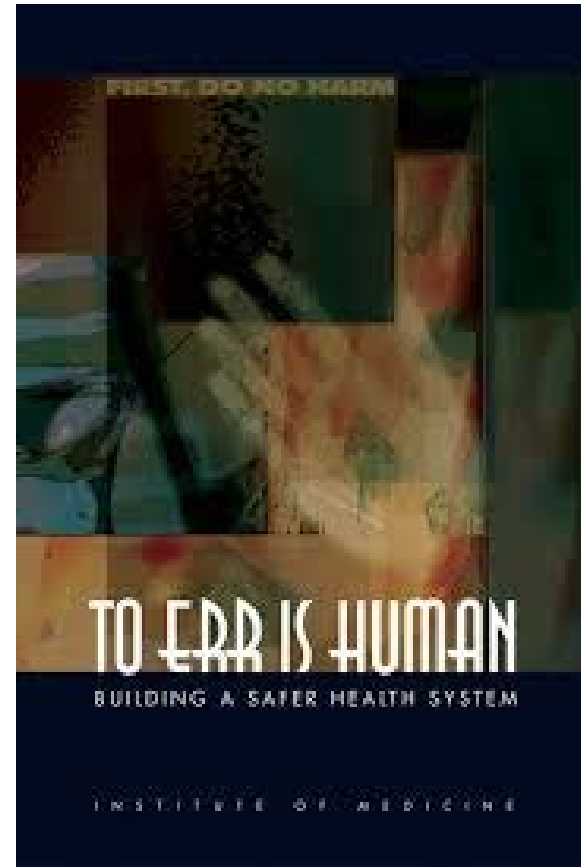
Outline of Presentation

1. Introduction to the project
2. What is VSPR?
3. Implementing the VSPR resource in education programs
4. Research examining the impact of VSPR in Non technical skills in undergraduates
5. Future directions

Introduction

Introduction

Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (2000). *To err is human: building a safer health system* (Vol. 627). National Academies Press.



Adverse Events in Healthcare

Analysis of accidents and adverse events within high risk industries revealed that up to 80% of causes can be attributed to human factors (Helmrich, 2000., Reason, 1990., Wagenaar & Groenweg, 1987 in Flin, O'Connor & Crichton, 2008).

In hospitals rates of adverse events to patients can be as high as 10% of all patient admissions (Flin, O'Connor & Crichton., 2008)

70-80% of these errors attributed to breakdowns in communication, teamwork and decision making (Bogner, 1994., Helmreich, 2000., Vincent, 2006 in Flin et al, 2008, Glavin & Maran, 2003).

Preparation of practitioners

Evidence suggests that work readiness among health graduates extends beyond technical and/or clinical skills and competence (Brennan et al, 2010)

The essential skills and competencies that new graduates identify as lacking are teamwork, confidence, coping with demanding working conditions and managing the increase in responsibility to make decisions in the clinical setting (Eley, 2010., Frenk et al. 2010)

Non-Technical Skills

Non-technical skills are defined as “the cognitive, social and personal resource skills that complement technical skills and contribute to safe and efficient task performance” (Flin, O’Connor & Crichton, 2008. pp1).

They include:

situational awareness; decision-making;
communication; teamwork; leadership; managing stress; and coping with fatigue

(Flin et al. 2008. pp1).

Virtual Simulation and NTS

Impact positively on decision making, situational awareness, teamwork, leadership and communication skills of health care professionals (Frenk et al 2010)

Flexible,

Sustainable approach

Reproducible and

Can be disseminated across large student numbers.

Permit access of learners to essential but at times unavailable clinical situations for practice and learning (Wolf et al., 2010)

What is VSPR?

VSPR

Web based learning resource to develop NTS in undergraduate health professionals utilising learning through simulation

Focus on

- Teamwork
- Communication,
- Leadership,
- Situational Awareness,
- Decision Making,

VSPR

A secure website accessed by a self registration process

Six modules to develop knowledge and awareness of NTS and the role they play in healthcare

Five “play your own adventure game” type online learning through simulation scenarios

A bank of learning through simulation scenarios that can be accessed and implemented on site to enable application of NTS

Developing VSPR

Establishment of an Expert Advisory Group (EAG)

- Education Experts, Simulation Experts, Online Education Design experts and Clinical Experts.

Online simulation scenarios determined by

- reviewing sentinel events in Victoria,
- Summarising top five scenarios for MET calls in large metro hospitals
- Experience and expertise of the EAG

Developing the details and scripts for the simulation

- All material reviewed by the EAG prior to being submitted for filming

VSPR

What does it look like?

www.vspr.net.au

Research Project

Research

Mixed methods research project

- Examine the impact of VSPR on NTS of undergraduate health professionals

Sample - student and facilitators

Pre-test and post test design completed prior to placement

Follow up focus groups after clinical placement

Future directions

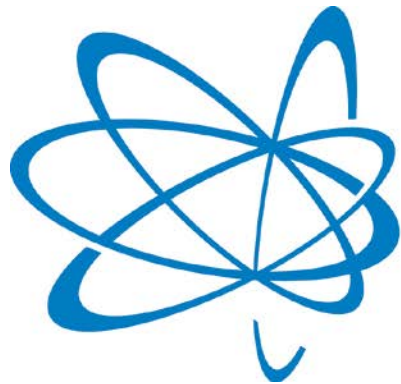
Second round funding

Extension to modules include stress and fatigue and task management

Two more scenarios - community and midwifery

Funding Attribution

This project was possible due to funding made available by Health Workforce Australia and the Department of Health, Victoria.



HealthWorkforce
AUSTRALIA



An Australian Government Initiative

Thank you

Kohn, L. T., Corrigan, J. M., & Donaldson, M. S. (Eds.). (2000). *To err is human: building a safer health system* (Vol. 627). National Academies Press.

Flin, R., O'Connor, P., & Crichton, M. (2008). *Safety at the sharp end: Training non-technical skills*. Ashgate Publishing.

Glavin, R. J., & Maran, N. J. (2003). Integrating human factors into the medical curriculum. *Medical Education*, 37, 59-64. doi: 10.1046/j.1365-2923.37.s1.5.x

Benedict, N., & Schonder, K. (2011). Patient simulation software to augment an advanced pharmaceuticals course. *American Journal of Pharmaceutical Education*, 75(2).

Eley, D. S. (2010). Junior doctors' perceptions of their preparedness for hospital work: Support for the rural clinical school model as a key to better preparation. *Medical Journal of Australia*, 192(2), 109.

Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T., . . . Kelley, P. (2010). Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *The Lancet*, 376(9756), 1923-1958.

Robertson, B., Kaplan, B., Atallah, H., Higgins, M., Lewitt, M. J., & Ander, D. (2010). The Use of Simulation and a Modified TeamSTEPPS Curriculum for Medical and Nursing Student Team Training. *Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare*, 5(6), 332-337.

Wolff, A. C., Pesut, B., & Regan, S. (2010). New graduate nurse practice readiness: Perspectives on the context shaping our understanding and expectations. *Nurse Education Today*, 30(2), 187-191.