

The Feasibility of Introducing an Evidence Based Practice Cycle into a Clinical Area: An Evaluation of Process and Outcome

Dr Jenny Morris & Dr Veronica Maynard
Faculty of Health & Social Work
University of Plymouth, UK

Aims

To examine the feasibility of introducing an evidence based practice cycle into one clinical area of a BSc pre-registration programme in order to integrate EBP theory with practice

To further develop EBP skills and knowledge in the clinical setting

Design & Methods

- A feasibility study using a pre-post test design
- Practice area: Cardiac ITU & HDU; four 3rd year BSc Adult Nursing students (& their mentors)
 - students had EBP module year 1; research methods year 2
- Five week EBP cycle that consisted of 4 meetings:
 - (i) outline project, baseline data; (ii) identify & confirm case to develop searchable question; (iii) critical appraisal; (iv) summary & final evaluation data
- Web site to co-ordinate resources & provide links to academic team

Methods (contd.) - Focus of Evaluation

- Process evaluation:
 - Ease of identifying practice area
 - Duration of EBP cycle
 - Ease of participation from student & mentor perspective
 - Feasibility of incorporation of cycle into undergraduate curriculum
- Outcome evaluation:
 - Changes in EBP knowledge & skills using adapted Fresno test of competence (*McCluskey, A. & Lovarini, M. 2005, BMC Medical Education, 5(40)* <http://www.biomedcentral.com/1472-6920/5/40>; *Ramos K. et al. 2003, BMJ, 326, 319-321*).
 - Perception of whether EBP cycle impacted on students' practice
 - Perceived value of cycle from students' & mentors' perspectives

Findings - Process

- Cycle was straightforward to set up but impossible to include students from more than one programme
- Time constraints for both students and their mentors
- Duration of cycle considered appropriate (5 weeks)
- Difficulties identified in accessing computers (students & mentors)

% Fresno Scores

Fresno Topics	Student Pre			Student Post		
	1	2	3	1	2	3
(1) Writing focussed question	75	75	75	75	75	75
(2) Sources of info	33	42	92	17	67	58
(3) Type study design	62	50	50	62	62	62
(4) Search strategy	33	58	50	58	67	67
(5) Relevance of design	0	37	21	21	50	21
(6) Internal validity	42	21	75	75	42	75
(7) Magnitude & significance of findings	0	0	21	42	42	42
Overall Scores (156)	32	38	53	48	56	56

Influence on Practice

- Valuable insights provided into how key clinical decisions were made
- Students felt participation in the cycle improved their knowledge of the management of the patient group studied
- Process aided integration into the unit (students & mentors)
- Perceived value by students & mentors of all elements of EBP process
- Able to use information collected in practice portfolio
- Felt university staff rather than mentors should be lead facilitators

Conclusions & Recommendations

- Feasible to incorporate EBP cycle in 3rd year placement
- Process revealed lack of knowledge about research methods at pre-test
- Students showed some improvement in knowledge and skills in key EBP elements
- Participation in the cycle developed students' knowledge around the case identified
- Taking part aided students' integration into the unit
- Mentors unable to provide support as anticipated
- Problems with access to computers on the unit (for both mentors & students)

Next Step

Research to identify alternative ways of: (i) enabling students to access relevant resources electronically; & (ii) providing students with academic support