Evidence based clinical nursing practice in a regional Australian healthcare setting: Predictors of skills and behaviours

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Summary

Aim: To establish correlates of self-reported skill levels and behaviours in relation to evidence-based practice (EBP) among a representative sample of regional Australian nurses and midwives in senior roles.

Background: A survey of regional Australian nurses and midwives indicated that EBP capacity remained low. Job satisfaction, psychological burnout and demographic factors were explored against EBP capacity domains, in order to identify a model which predicted capacity among this group.

Method: A quantitative cross-sectional survey which utilised the Developing Evidence Based Practice Questionnaire (DEBPQ) and demographic, job satisfaction and psychological burnout indexes was conducted in early 2012 among senior nurses and midwives of a regional New South Wales Local Health District. Online and hard copy surveys were used and distributed to 405 nurses with 169 returning the survey, representing a response rate of 42%. Stepwise multiple regression procedures were employed to derive predictive models of EBP skill level and behaviour.

Results: Three predictive models were obtained. Firstly, higher educational level, lower emotional exhaustion and higher relational job satisfaction were found to be the best predictors of EBP skill level. Secondly, higher extrinsic and relational job satisfaction and higher personal accomplishment were found to be the best predictors of changing practice on the basis of evidence. Thirdly, higher extrinsic and intrinsic job satisfaction and working full time were found to be the best predictors of accessing and reading evidence.

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Conclusion: Education level and extrinsic job satisfaction are key correlates of EBP capacity in this regional Australian sample.

Implications for practice: Nursing workplace policy which promotes and supports the pursuit of post-graduate education and which promotes job satisfaction gain, is likely to result in EBP capacity-related gains among senior nurses and midwives.

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1. Background

It is well accepted that evidence-based practice (EBP) in nursing and midwifery remains in its formative stages and that scoring on EBP related knowledge, practices and attitudes among nurses has often been found to be low (IOM, 2008; Koehn & Lehman, 2008). A recent (2012) survey of EBP related behaviours, skills and perceived barriers among a representative sample of regional Australian nurses and midwives again found this to be the case (Fairbrother, Cashin, Conway, Symes, & Graham, 2014).

Key domains of EBP capacity in nursing and midwifery relate to locating, appraising and using research evidence in the patient care context. EBP capacity can be constructed as both an intrinsic or within-nurse phenomenon and as an extrinsic, or wider organisational phenomenon. EBP capacity is generally operationalised in the context of clinical decision making (Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). The skilled use of evidence based clinical guideline and policy material (as well as original research and systematic review material) is also key to capacity. The ability to contextualise the use of best evidence with a clinician's own clinical expertise and their patients' preferences is central to today's understanding of capacity (Melnyk & Fineout-Overholt, 2011).

Individual nurses and midwives develop their capacity for EBP and grow their EBP skillsets in the context of their own practice environment. However, this capacity can be affected by wider organisational and institutional factors (Gerrish et al., 2007). Job satisfaction has emerged as a valid predictor of professional wellness and this has been cross-sectionally linked with retention care quality and EBP capacity (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Aiken et al., 2012). Also leadership and workplace culture have been identified as key action and focus areas in relation to developing nursing organisational structures and processes which foster and grow EBP (McCormack et al., 2002; Newhouse, 2007).

Age has been linked to nursing job satisfaction in a recent large country-wide Canadian sample. Lower satisfaction was found among younger nurses (Wilson, Squires, Widger, Cranley, & Tourangeau, 2008). These survey findings highlighted lack of clinical autonomy as central to the age-based finding. With reference to the intrinsic/extrinsic characterisation of EBP capacity proposed above: at the intrinsic level, clinical autonomy is likely impacted upon by individual EBP skillset and motivation, as it is at the extrinsic level, by the organisation's EBP readiness (in terms of its culture, leadership and resourcing priorities). In this scenario, it is not surprising that seniority and post-graduate degree completion have both been related in the positive to EBP capacity (Gerrish, Ashworth, Lacey, & Bailey, 2008).

Psychological burnout has been cross-sectionally linked to care outcome (Aiken et al., 2002). As has been shown to be the case for job dissatisfaction, the autonomy of the professional nursing environment has been linked to nursing burnout (Leiter & Spence Laschinger, 2006). In this sense, burnout is a likely correlate of EBP capacity in nursing and midwifery.

Research exploring the correlates of EBP capacity is needed, in order for capacity building interventions to take account of prevailing influential factors and more effectively target knowledge translation gains. Such information is of value to regional Australian nursing and midwifery, as these sectors continue to experience a resource differential which is not in their favour when compared to metropolitan environments (Bourke, Coffin, Taylor, & Fuller, 2010). If regional nurses and midwives are to be asked to continue to do more with less, understanding the drivers of their evidence utilisation capacity perhaps becomes even more important.

Prior to commencing a 2–3 year evidence based practice capacity building intervention among the nurses and midwives of the Northern New South Wales Local Health District (NNSW LHD) — a 21,470 km^2 regional Australian health district comprising 11 major non-metropolitan, rural referral, district or community-based hospitals and services and employing about 2000 nurses and midwives (NSW Health Ministry, 2011) — an evidence based practice-focused needs assessment survey was conducted among the initial target group for capacity-building activity, nurses and midwives in senior clinical, educational and managerial roles.

The cross-sectionally analysed results of this baseline data collection exercise which sought information on evidence based practice related behaviours and attitudes, demographics, job satisfaction and psychological burnout are presented here.

2. Aims

Two principal aims were pursued in this study:

(i) To establish demographic-, job satisfaction- and burnout-related correlates of self-reported EBP skill levels and barriers to EBP;
(ii) To derive predictive models of EBP skill level, barriers to changing practice on the basis of evidence and barriers to finding and reviewing evidence;

among a representative sample of regional Australian nurses and midwives in senior roles.