Title:
Integration of Evidence-Based Practice in Undergraduate Nursing Education Across Australian Universities: A Grounded Theory Study

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References:

Abstract Summary:
This poster presents a grounded theory, explicating the processes and activities nurse academics were engaged with, while integrating EBP into undergraduate education across Australia.

Learning Activity:

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<td>• Develop an understanding of the study purpose and the related outcomes of the study conceptualised as a substantive theory.</td>
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<td>• Determine the implications of findings to education and practice; also relate them to their own educational practices.</td>
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Abstract Text:

Background

Considering the growing need to adopt an evidence-based practice (EBP) approach in response to increasing complexities in healthcare, nurses must be adequately prepared in their undergraduate degrees to implement EBP in clinical practice. However, there is a plethora of studies reporting that nurses' educational preparation for embracing EBP is consistently inadequate (Malik, McKenna & Plummer, 2015; Eizenberg, 2010). EBP adoption by graduating nurses depends on the degree to which it
is emphasised by academics and the extent to which it is integrated into course content and outcomes (Melnyk & Fineout-Overholt, 2015). Despite the existence of many studies on EBP, its inclusion in nursing education is limited and represents an area of crucial investigation.

Although the significance of applying evidence to practice is unquestionable, many Australian and international undergraduate programs continue to emphasise research process and underpinning methodology, rather than teaching research from evidence-based perspectives (Malik, McKenna & Griffiths, 2015; Brooke, Hvalič-Touzery & Skela-Savič, 2015). An analysis of curriculum outlines from tertiary education providers exploring how EBP was introduced into Bachelor of Nursing programs across Australian universities revealed that amongst 35 education providers, three did not appear to offer any units on research or EBP. Twenty-five providers combined units on research and EBP with major emphasis on research designs and process. In regards to EBP integration into curricula, a majority of the providers appeared to embed EBP related concepts between one and twelve units of study. Significant variations were found between universities with regards to when these units were introduced (Malik, McKenna & Griffiths, 2015). This analysis has given insight to some extent into EBP education in Australian undergraduate programs, however further understanding into processes academics undertake to incorporate EBP concepts into their teaching practices within BN programs was needed, which this study aimed to explore.

**Aim**

This poster reports the resulting substantive theory, conceptualised as: “On a path to success: Endeavouring to contextualise curricula within an EBP framework”, which offers an abstract understanding of the processes and activities academics were engaged with when considering to integrate EBP in undergraduate education.

**Methods**

**Design**

Considering the aim of the study, a constructivist grounded theory informed by Kathy Charmaz was employed. Having its roots embedded in symbolic interactionism, this methodology was suitable for the current study as the purpose was to explore processes in the specific context. Informed by Charmaz (2006), the constructivist theorist views data as constructed between participants and researcher rather than discovered; and analysis as interpretive rather than predictive. The resultant theory offers the greatest range of interpretation and understanding of concepts, grounded in data. An important characteristic of GTM is allowing data collection using a variety of sources to understand how research participants construct and define their realities through interactions (Charmaz, 2006).

**Data Collection**

Ethical approval was granted from the relevant university. Using purposive sampling, nursing academics across Australian educational institutions offering undergraduate nursing programs were invited to participate. Study invitations were sent to the respective heads of schools for distribution to potential participants. Interested participants contacted the researcher and consented to be interviewed and/or observed. Twenty three nursing academics were interviewed until emerging categories were saturated. Participants were interviewed one-on-one at their work premises, or a mutually agreed location for approximately one hour, using a semi-structured format. With participants’ permission, interviews were audio recorded and subsequently transcribed.

Nine participants consented to be observed during lectures, tutorials or laboratory teaching with undergraduate students. Field notes were written during and after observations. Additionally, twenty unit guides were analysed to add richness to data that were shared by some participants. Throughout the
research process, participants were assigned pseudonyms by which their anonymity and confidentiality were protected.

Data Analysis

In keeping with the tenets of grounded theory, data collection and analysis were simultaneously performed and continued until theoretical saturation was reached. Data were analysed using open, focused and theoretical coding, proposed by Charmaz (2014). NVivo 10 was used to organise data. Interview transcripts and field notes were read multiple times to generate open and focused codes. Codes were raised to sub-categories which were compared with data to seek relevance and fit. By using the constant comparative method, sub-categories were further developed to a level where emerging categories could be examined and compared with codes and emerging concepts. As a result of this iterative and interactive process, four categories emerged. Using theoretical coding, the emerged categories were further raised to an abstract level where they were theorised in a form of a core category. Immersion in data by reading and analysing interview transcripts repeatedly, writing field notes, maintaining a reflective diary and engaging in extensive memo writing allowed the researchers to acknowledge their own assumptions and ensured that preconceived ideas were not imposed on findings.

Results

In line with constructivist GTM, the theoretical construct, “On a path to success: Endeavouring to contextualise curricula within an EBP framework”, explicates a core process utilised by most participants and offers understanding of participants’ actions and processes, as a response to the central problem. The theoretical construct overarches the existing processes identified in three transitional stages: Embarking on a journey-Being prepared, Encountering challenges and Moving ahead-Linking EBP theory to practice. This theoretical construct reflects the actions, perspectives and interplay between academics, curricula and practice settings. Four interrelated categories present the activities academics undertook during the core process comprising Valuing and Engaging with EBP, Enacting EBP curriculum, Influencing EBP integration and Envisaging EBP use. However, these processes are moderated by a number of contextual determinants found to be influential, including academic settings and individuals, curricula design and delivery, and practice settings. The theoretical model, provides a visual representation of the relationship between them, which will be illustrated in the poster.

In the first transitional stage, the initial approach for all participants was to embark on a journey to offer EBP education. By getting involved with research activities, understanding EBP concepts, keeping abreast with literature and using evidence in their teaching, academics had demonstrated their preparation towards instilling EBP knowledge and skills in students. A number of academics were engaged in designing and enacting EBP and research units and others worked towards embedding EBP across units. Academics’ understanding, their engagement and passion for EBP determined how they moved forward in their journey and influenced the design and implementation of curricula fully underpinned by EBP principles.

Moving forward, the second stage posed many challenges with regard to research and EBP units’ content and delivery. Embedding EBP across units by unpacking the curriculum to see how EBP was integrated in existing units and how this could be fully embedded were considered demanding but an ongoing process. All participants expressed concerns including students’ disengagement with research and EBP units, limited time to aligning and updating units, crowded curricula, heavy workloads, inexperienced academics in designing curriculum, and lack of support from schools.

The third transitional stage reflects strategies used by academics in minimising their struggles faced earlier. Despite those challenges, academics moved ahead and endeavoured to include EBP concepts into teaching units. This was mainly an individual approach of using a variety of teaching and learning strategies to make EBP theory and practice link visible, and striving to engage students with the EBP framework as an ultimate outcome. In its interpretation, the theory reflects the endeavours of academics’
aiming to contextualise curricula in a manner that engages students with the EBP framework. Overall, this path appeared to be winding and was influenced by contextual determinants. The presented journey is not linear, rather it meanders back and forth, connected in each phase very closely.

The presented theory is grounded in data as the core process meets the criteria proposed by Charmaz (2014) that integrates relationships between the stages and categories. It is a process, which is comprehensive, occurs over time, and helps to understand variation in the data.

**Implications**

Current study findings create a call for educational institutions and practice settings to employ strategies such as including EBP as an integral part of a school’s philosophy, infusing EBP principles and concepts into academics’ ongoing developmental opportunities, mentoring in designing and implementing an EBP embedded curricula, creating academia-practice partnerships, and provision of sufficient resources within school and clinical settings serve as effective means for successful EBP integration. These implications support participants’ recommendations for a paradigm shift from isolated research courses to curricula fully encompassing EBP pedagogies. Largely, very limited examples of how EBP has been threaded through the curriculum are cited in the global literature.

**Conclusion**

This study has adopted a unique approach in presenting a core process, explaining academics’ journeys that may be used to explain similar phenomenon. Our theory raises awareness of activities undertaken by academics and related challenges faced by them when considering to include EBP into undergraduate education. Future research could examine effectiveness of implemented strategies on academics’ engagement with EBP and its inclusion into their teaching practices.