

Nurses' Perceptions of Evidence-Based Practice

Karen D. Lehman*

School of Nursing, College of Health Professions

Abstract. Evidence-based practice (EBP) has emerged as a marker for health care quality. However, several barriers prevent the transition of nursing research to practice, such as lack of knowledge, lack of time, and little perceived value. The purpose of this descriptive study was to examine the extent of current understanding of EBP, knowledge/skills, and attitudes among registered nurses in an urban Midwestern hospital. A convenience sample of 422 (40.9%) nurses returned the Clinical Effectiveness and EBP Questionnaire. Results indicated that nurses generally had a positive attitude towards EBP. Level of education was found to be an important factor in EBP. However, some inconsistencies were found. ADN-prepared nurses had higher mean scores in EBP process than those with a diploma or BSN, but had the lowest mean scores in attitude. These results indicate that there may be an organizational misunderstanding of EBP. It is, however, possible that the nurses' higher perceptions of EBP will influence success of implementation. EBP educational programs, therefore, may be met with greater overall consent and improved application.

1. Introduction

In recent years, a greater emphasis has been placed on the delivery of patient centered, scientific-based nursing care. Health care organizations have responded to the public's concern; more hospitals have pursued Magnet designation, the "gold seal" of nursing quality. However, research has discovered significant gaps between research and nursing practice, largely due to barriers such as lack of research knowledge and skills [1-6]. One large hospital in Wichita, Kansas developed a Magnet committee to facilitate application of best practice guidelines and support EBP in nursing. The committee distributed an evidence-based questionnaire to identify current knowledge and attitudes regarding EBP. The Magnet committee hoped to implement specific educational needs based upon the identified barriers and research needs.

2. Experiment, Results, Discussion, and Significance

Instrumentation

This study used the Clinical Effectiveness and Evidence-based Practice Questionnaire, a 24-item Likert-style survey [7]. Items were scored on a scale from 1-7, with higher scores indicating more positive attitudes and greater EBP knowledge. The questionnaire was distributed to all nurses in the hospital of study, which totaled 1,031. In all, 422 (40.9%) surveys were returned, and 407 were used in analysis.

The SPSS program was used to analyze data with the significance level set at .05 level of significance. Descriptive statistics were used to analyze the distributions of responses. Multivariate analysis of variance (MANOVA) was used to measure variations in attitude, practice, and knowledge subscales by education. Content analysis examined the responses to questions about barriers to EBP.

Findings

Staff nurses represented the largest group of respondents (323). Those aged 41-50 (35.2%) and with more than 20 years of experience (37.8%) returned the most surveys. Those who were BSN-prepared returned the most surveys (196), followed by ADN (122), diploma (62), and MSN (28).

In general, nurses rated themselves higher than expected in EBP practice (5.21) and attitude (5.19), and lowest in knowledge (4.67). Overall, individual item means scores across subscales showed little variation (See Table 1). ADN-prepared nurses had the highest mean in EBP process (5.02), yet had the lowest mean in attitude (4.90). Those who read research journals (44.7%) had higher means in all three measures than those who did not read. Significant differences were found among the four educational levels and the attitude scores

(Wilks's $\Lambda = .93$. $F(9, 976) = 3.16$, $p = .001$), while practice and knowledge scores were nonsignificant (see Table 2). Those with BSN and MSN preparation showed significantly different attitudes towards EBP. Additionally, 52% reported that they did not read or subscribe to a nursing journal. It would be a reasonable conclusion to expect that if nurses were proficient in EBP, they would also be proficient in using EBP skills. Thus, these inconsistencies suggest the need for further exploration and the development of an educational plan to assist nurses with EBP knowledge and skills.

Table 1 Age and EBP Process, Skills, and Attitude

Age	EBP Process	EBP Skills	EBP Attitude
21-30	4.7500	4.6255	5.2366
31-40	5.0502	4.8112	5.2676
41-50	5.1903	4.7202	5.1684
>50	5.0544	4.5416	5.1612

Table 2 Means and Standard Deviations on the EBPQ Subscales for Four Groups ($n = 407^*$)

*Missing Data = 15

The most common barrier reported was “no time” (39.4%), followed by “limited knowledge” (23.4%), “too costly”

EBP Subscales	Education									
	Diploma ($n = 61$)		Associate Degree ($n=123$)		Baccalaureate Degree ($n = 195$)		Master's Degree ($n = 28$)		Total ($n = 407$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Use of EBP	4.98	1.23	5.01	1.41	4.92	1.35	5.65	0.76	5.21	1.32
Knowledge/skills of EBP	4.56	0.95	4.60	1.00	4.66	1.01	5.15	0.68	4.67	.98
Attitudes towards EBP	5.03	1.06	4.90	1.12	5.34	1.08	5.59	0.86	5.19	1.10

(11.4%), “no nurse with research experience in immediate area” (9%), and “no interest by nursing leader” (4.7%). Twelve percent reported there were “no barriers”. Additional comments included concerns about change, difficulty understanding the questionnaire or EBP, and time/staffing issues.

3. Conclusions

Participants scored themselves moderately to fairly high on all three subscales, especially practice and attitudes. The minimal variation across scores suggests that participants did not fully understand the EBP terminology in the questionnaire. While these results indicate that there may be an organizational misunderstanding of EBP, the overall attitudes and perception of EBP were generally high, and may result in greater overall consent and improved application. Addressing the identified implementation challenges will be a fundamental step in shifting the organizational culture during this hospital's pursuit of Magnet recognition.

4. Acknowledgements

The author would like to acknowledge Mary Koehn, PhD, ARNP, Assistant Professor of Nursing, for her assistance and guidance during the data collection and analysis processes.

- [1] Bradley, E.H., Schlesinger, M., Webster, T.R., Baker, D., & Inouye, S.K. (2004). *Journal of American Geriatrics Society*, 52(11), 1875-1882.
- [2] Brancato, V.C. (2006). *Nurse Educator*, 31(5), 195-199.
- [3] Fink, R., Thompson, C.J., and Bonnes, D. (2005). *Journal of Nursing Administration*, 35(12), 517-523.
- [4] Olade, R.A. (2004). *Journal of Nursing Scholarship*, 36(3), 220-225.
- [5] Melnyk, B.M., Fineout-Overholt, E., Fienstein, N., Li, H., Small, L., Wilcox, L., et al. (2004). *Worldviews on Evidence-Based Nursing*, 1(3), 185-193.
- [6] Pravikoff, D.S., Tanner, A.B., & Pierce, S.T. (2005). *American Journal of Nursing*, 105(9), 40-51.
- [7] Upton, D., & Upton, P. (1998). *British Journal of Therapy and Rehabilitation*, 5, 657-650.