EVALUATION OF NURSING AWARENESS ABOUT EVIDENCE - BASED PRACTICE AT NHAN AI HOSPITAL IN 2020

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Summary

Objectives: Describe the nurse's knowledge, skills, and attitudes about EBP. Determine the relationship between some demographic factors (age, gender, professional qualifications, working time, training on EBP) with knowledge, attitude and skills of nurses about EBP.

Subjects and methods: A cross - sectional description was used in this study. All nurses with college degrees or higher and have worked at the charity hospital for 6 months or more. Data were collected from June to September 2020 using a self - completed questionnaire.

Results: the results of a study of 105 nurses showed that the knowledge, attitude and practice of nurses about EBP with the corresponding average scores: $(4.49 \pm 0.45) : (4.08 \pm 0.34) : (4.69 \pm 0.43)$. The factors of age, gender, education level, working time, function and training on EBP have a statistically significant relationship ($p < 0.05$). The positive correlation between knowledge score and attitude towards EBP with coefficient $r = 0.253$. The negative correlation between knowledge score vs practice towards EBP correlation coefficient $r = - 0.06$. The positive correlation between attitude score versus knowledge towards EBP correlation coefficient $r = 0.253$. There is a strong positive correlation between attitude score versus practice towards EBP correlation coefficient $r = 0.955$.

Conclusions: Provide appropriate strategies to improve the knowledge, attitude and practice of EBP for nurses, thereby encouraging them to apply the latest evidence in patient care, contributing to improving service quality, medical service.

Key words: *Evidence - based practice, knowledge, attitude, practice, nursing.*

INTRODUCTION

Evidence - based practice (EBP) is a new approach that is being applied in many areas of medicine. Author Elarab et al reported that 25% of nurses practice well for EBP[1]. The study by Majid et al., surveying the perceptions of nurses about knowledge and barriers at a Singapore hospital, measuring the perception of nurses in EBP based on the self - reported results of nurses, the results showed that 64% of the nurses had an attitude positive for EBP[2]. Author Ammouri et al also reported that 75.4% of nurses have a positive attitude towards EBP[3]. In general, studies in the world show that the rate of practicing nurses for EBP ranges from 15.7% to 75.4%.

In Vietnam, EBP is one of the contents of the set of criteria for evaluating hospital quality[4]. In 2012, the Ministry of Health defined EBP as the 9th criterion in standard 21 of the nursing competency standard[5], and at the same time, it was also the 20th criterion of the nursing professional ethics standard[6]. Therefore, EBP has been implemented and taught in the program to strengthen the capacity of management of nursing research. However, most of DD's studies on EBP were conducted in foreign countries. Up to this point in Vietnam, we find that the research on EBP in nursing care is still very limited. Research results of Bui Thi Thu Ha and colleagues in Da Nang said that evidence - based practice nurses are limited[7].

Research by Giang Nhan Tri Nghia et al. said that in 260 nurses with positive attitudes towards EBP, they rarely practice them due to lack of EBP knowledge/skills. For female nurses, nurses with many years of experience self - assess knowledge/skills and practice more, management nurses have more positive attitudes than nurses, university nurses have more knowledge/skills than female nurses with high DD[8].

Author Nguyen Thi Bich Tram and colleagues said: Nurses with EBP knowledge have the average score of EBP (3.66 ± 0.53) and EBP practice skills have average score (3.59 ± 0.80) at the level. moderate and negative attitudes EBP has a mean score (3.81 ± 0.81). Nurses with more than 10 years of work experience will have higher average scores than nurses with ≤ 5 years of work experience in all three aspects of EBP practice, attitude and knowledge/skills. Barriers found affecting the application of EBPQ in nursing care include lack of time, cost, limited/incomplete knowledge and lack of nurses with research knowledge in the working environment[9].

Research results show that nurses with a positive attitude about EBP have a mean score (5.08 ± 1.34), but their knowledge and skills about EBP are only at an average level (4.00 ± 1, 23) and (3.79 ± 1.39). The factors of age, gender and number of years of service have no relationship with the knowledge, attitude and skills of EBPQ of nurses; professional level has a positive correlation with EBP knowledge (r = 0.053; p < 0.1); with attitude about EBP (r = 0.112; p < 0.05); and with EBP skill (r = 0.125; p < 0.01). Nurses who have ever participated in scientific research have a proportional relationship with EBP knowledge (r = 0.388; p < 0.01); with attitudes about EBP (r = 0.521; p < 0.01) and with EBP skills (r = 0.31 ; p < 0.01)[10]. Most of DD's studies on EBP were conducted abroad. To learn more about this issue, we carry out this topic with the following objectives: (1). Describe the nurse's knowledge, skills, and attitudes about EBP. (2). Determine the relationship between some demographic factors (age, gender, professional qualifications, working time, training on EBP) with knowledge, attitude and skills of nurses about EBP.

SUBJECTS AND METHODS

Study Design: A cross - sectional description was used in this study.

Research subjects: are all nurses with college degrees or higher and have worked at the charity hospital for 6 months or more. Data were collected from June to September 2020 using a self - completed questionnaire.

Methods: A cross - sectional description was used in this study.

Sample size and sampling method: The convenience sampling method was applied in this study. All nurses with a college degree or higher and with a working period of 6 months or more were selected to participate in the study. Through the head of the hospital nursing department and the head nurses, the questionnaire was sent to a total of 121 qualified nurses and the number of answer sheets collected was 105. The questionnaire consisted of 2 parts: *Part I:* Ask about personal information of research subjects such as age, gender, highest professional qualifications, years of experience and training in EBP. *Part II:* is a set of questions to assess the knowledge, attitudes and skills of nurses about EBP by Upton et al. This section includes 24 questions according to the applied Likert structure, on a scale of 1 to 7. The nurse's EBP knowledge was assessed using 14 questions and was divided into low (average score from 1.0 to less than 3.0), medium (average score from 3.0 to less than 5.0) and high (grade point average from 5.0 to less than 7.0); EBP practice skills are assessed by 06 questions with 1 being "never done" and 7 being "always"; The remaining 04 questions are used to assess nurses' attitudes about EBP. Nurses' attitudes towards EBP were considered positive when the mean score of attitude was 4.0 or higher[2,8]. Part 2 of the questionnaire was translated into Vietnamese according to the "back - translation" process. The reliability coefficient of the translation into Vietnamese with the results is 0.83 for all 24 questions and 0.84; 0.88; and 0.80 for knowledge sections; skill; and attitude.

Data were processed using Stata 12.0 statistical software with alpha 0.05 confidence. Descriptive statistics are used to describe individual information as well as nurses' knowledge, attitudes, and skills about EBP. Pearson and Spearmans correlation was used to determine the relationship between the factors of age, gender, professional level, participation in scientific research and available data sources with knowledge, attitude, skills and practice of EBP of students. Nursing.

RESULTS

Table 1. Demographic characteristics of the study subjects (n = 105)

Content	Frequency	Rate(%)
Sex		
Male	37	35.2
Female	68	64.8
Age group		
20 - 29 years old	34	32.4
30 - 39 years old	65	60.0
≥ 40 years old	6	5.7
Mean=32.29±5,22, Median, interquartile range 32(29-35); Mim=22; Max= 48		
Specialize		
College	4	3.8
University	101	96.2
Working years		
< 5 years	26	24.7
5 - 10 years	47	44.8
> 10 years	32	30.5
Average = 8.75 ± 4.61; Median, Interquartile Range 9 (5 - 12)		
Training on EBP		
Trained	30	28.6
No training	75	71.4

Comments: There were 105 nurses participating in this study. The results showed that female nurses accounted for 64.8%, the mean age was 32.29 (SD = 5.22), with the average number of years of service 8.75 (SD = 4.61). Of which 3.8% of nurses have college degrees; 96.2% of nurses have university degrees, 28.6% have attended training on EBP.

Nurses' knowledge, attitudes, and skills to practice EBP

Table 2. The average score in nursing awareness with knowledge of EBP (105)

Knowledge	Mean ± SD
Skills in information technology	3.65 ± 1.28
Monitor and review practical skills	4.30 ± 0.96
Identify the main types of information sources	4.55 ± 1.05
Ability to identify deficiencies in practice	3.96 ± 1.06
Know how to access and collect evidence	4.62 ± 0.94
Ability to evaluate evidence based on table	4.80 ± 0.94
Ability to determine the validity of documents	4.26 ± 1.23
Ability to determine the usefulness of a document	4.21 ± 1.14
Applicability of information in specific cases	4.32 ± 1.07
Share ideas and information with colleagues	4.35 ± 0.85
Disseminating new ideas about care for colleagues	4.46 ± 0.93
Ability to review one's own practice	4.88 ± 1.31
Research skills	4.68 ± 1.09
Translating information from a question into a research question	4.69 ± 1.10

Comments: The scores of the content in the knowledge section of the nurses related to EBP that they reported with a knowledge level below the average, the average cutoff point was ≤ 4 points, including: "Information technology skills" The average score is (3.65 ± 1.28) points and (3.96 ± 1.06) is the score of "Ability to identify deficiencies in professional practice".

Table 3. Mean score of attitude towards evidence-based practice (n = 105)

Knowledge	Mean ± SD
Organize your work schedule to spend time looking for evidence	4.31 + 1.24
I am ready to accept questions in practice	5.01 + 1.33
TDTBC is the basic foundation in professional practice	5.22 + 1.63
My practice has changed since I found proof	4.09 + 1.46

Comments: 100% of the average scores of attitude content towards the EBP application have an above-average score of > 4 points.

Table 4. Means of nurses' awareness of EBP - oriented practices (n = 105)

Knowledge	Mean ± SD
Pose a clear clinical question	3.97 ± 1.31
Finding evidence relevant to clinical question	3.93 ± 1.31
Integrating the evidence found with clinical experience	3.20 ± 1.53
Evaluate your available results	3.84 ± 1.65
Evaluate your available results	4.47 ± 1.29
Evaluate the literature found according to the standard table	4.68 ± 1.42

Comments: The majority of "4/6 sentences" with Mean ± DS of cognitive steps in practice for EBP have above - average score < 4 points.

Table 5. Level of knowledge, attitude and practice on three dimensions (n = 105)

Perception	Mean ± SD	Median Interquartile Range
Knowledge	4.41 ± 1.05	4.40 (4.27 - 4.67)
Attitude	4.50 ± 1.65	4.53 (4.20 - 4.83)
Practice	4.01 ±1.41	3.95 (3.86 - 4.34)

Comments: The results of the table above show that the scores on practice in EBP have above - average scores, with a mean score of (4.01 ± 1.41) points with a median of 3.95 and inter quartiles is (3.86 - 4.34).

The relationship between perception of knowledge, attitude and practice towards evidence - based practice and anthropological characteristics of research subjects

Table 6. Relationship between EBP and general characteristics of study subjects (n = 105)

Characteristics		Knowledge	Attitude	Practice
Sex	Male	3.77 ± 0.25	4.60 ± 0.12	4.85 ± 0.20
	Female	4.70 ± 0.18	3.96 ± 0.09	4.66 ± 0.16
	p*	0.0000	0.0000	0.0001
Age group	≤ 30 years old	4.53 ± 0.13	4.48 ± 0,16	4.11 ± 0,14
	> 30 years old	4.46 ± 0.12	4.73 ± 0.25	4.45 ± 0.10
	p*	0.028	0.0001	0.0000
Specialize	University	4.43 ± 0,22	4.38 ± 0.36	4.31 ± 0.24
	College	4.27 ± 0.11	4.63 ± 0.45	4.55 ± 0.13
	p*	0.0082	0.026	0.0004
Time go on bussiness	≤ 10 years	4.97 ± 0.45	4.41 ± 0.11	4.15 ± 0.31
	> 10 years	4.63 ± 0.17	3.96 ± 0.09	4.56 ± 0.37
	P*	0.0001	0.0000	0.0000
Training	Trained	4.71 ± 0.35	4.11 ± 0.51	4.65 ± 0.31
	Trained	4.53 ± 0.17	3.76 ± 0.09	4.76 ± 0.47
	p*	0.0000	0.0000	0.45

* Test

Correlation between perception of knowledge, attitude and practice towards specific EBP with anthropological characteristics of research subjects

Table 7. Correlation between EBP and general characteristics of study subjects (n = 105)

Awareness	Knowledge/skills	Attitude	Practice
	r_s	r_s	r_s
Attitud		0.25	-0.06
Attitude	0.25		0,95
Practice	-0.06	0.95	

Note: r_s: spearman correlation coefficient with quantitative variable is not normally distributed.

DISCUSSIONS

The study was conducted to describe nurses' perceptions of practice, attitudes, knowledge/skills about EBP and to determine the influence of professional qualifications and years of experience as a nurse on practice. , attitude, knowledge/skills about EBP.

About knowledge: The research results suggest that the average score of knowledge is (4.14 ± 0.05) points (table 5), which means that the knowledge about EBP of the nurses in the sample is at a high level. medium. This result is higher than the study of author Giang Nhan Tri Nghia and colleagues (4.07 ± 0.82) points[8] but lower

than the study of Ammouri (4.97 ± 0, 86) points[3], and the study of Majid S, Foo S, Luyt B and al (4.56 ± 0.95) points[2].

This could be explained by the fact that the new EBP program was launched in 2012 by the Ministry of Health and the Women's Union, so EBP knowledge for nurses is new and until now has only been formally taught in the nursing and post-graduate management programs. study, not yet taught in a college or university program. On the other hand, studies in the literature are conducted in developed countries. In Vietnam, the nursing industry is still young compared to the world, so the number of undergraduate and graduate nurses is still limited. In addition, this study also found two items (Table 2) with the lowest mean score for EBP knowledge: (1) "research skills" with the average score (3.65 ± 1). 28) points and(4) "skills to identify deficiencies in practice" (3.96 ± 1.06) points.

Attitude: The average score of attitude towards EBP application is (4.50 ± 1.65) points (table 5). This result is lower than other studies such as: Giang Nhan Tri Nghia et al (4.62 ± 0.98) points[8], or Pham Thi Oanh et al (5.08 ± 1.34 points) score[10], but higher than Nguyen Thi Bich Tram et al (3.81 ± 0.81) score[9], in general, other studies in the world are higher[2,3]. This is the difference in attitudes of nurses in this study compared to nurses in the world.

About practice: Perception of practice for EBP assessed based on the nurse's self - report on the extent to which the steps in the EBP process were performed during patient care. According to the research results, the average score of practice for EBP is (4.01 ± 1.41) points (table 5). That means awareness of practices for EBP is average. This result is lower than the mean score in other studies such as Ammuori (4.92 ± 1.25) points[3], but higher than the study of Giang Nhan Tri Nghia et al (3.05 ± 0.96) points[8].

Relating to gender: The study showed that men had lower scores on average practice knowledge in EBP than women (p = 0.000 < 0.05), while the mean scores on attitude and practice were lower than that of women. The performance of men is higher than that of women with p = 0.000 < 0.05 (attitude) and p = 0.000 < 0.05 (practice). There are differences between gender versus knowledge, attitudes and practices.

Related to age: The results of this study found that nurses aged ≥ 30 years older than the group < 30 years had statistically significant knowledge, attitude and practice, corresponding to p = 0.000 < 0.05; attitude p = 0.000 < 0.05 and practice p = 0.001 < 0.05. This relationship is similar to that in Ammuori's study[3]. This is also consistent with Rogers' model of the diffusion of new initiatives which states: "The adoption of a real change is not a passive process of new problem application, but rather an opportunity for the applicant to consider whether the practice is really appropriate in their particular working environment"[8].

Relevance to Expertise: In this study, perceived scores of EBP - based knowledge, attitudes, and practices were significantly associated with professional qualifications. College nurses have higher EBP knowledge scores than college nurses. In which knowledge has p = 0.008 < 0.05, attitude has = 0.026 < 0.05 and practice p = 0.0004 < 0.05. This relationship is also consistent with other authors in the world[3,8]. Although both college and university nursing training programs do not have formal teaching on EBP for nursing students in Vietnam.

Related to working seniority: According to the research results, it is found that nurses with working seniority > 10 years have higher knowledge (p = 0.0001 < 0.05), attitude (p = 0.000 < 0.05) and practice (p = 0.000 < 0.05) compared with nurses with ≤ 10 years of working experience. This difference may be due to the fact that nurses are older and often use research - based sources of evidence to answer clinical questions. EBP helps senior nurses to adjust practice changes to better suit their work.

EBP training relevance: The results of this study showed that scores based on knowledge, attitudes and practices towards EBP were statistically significantly associated with training compared with no EBP training. Example p = 0.000 < 0.05 (knowledge), attitude p = 0.000 < 0.05 and practice p = 0.004 < 0.05. There is a positive and very weak correlation between knowledge scores and attitudes towards EBP with correlation coefficient rs = 0.253. There is a negative and very weak correlation between knowledge scores compared to practice towards EBP with correlation coefficient rs = -0.06. There is a positive and very weak correlation between

attitude score versus knowledge towards EBP with correlation coefficient rs = 0.253. The positive and very strong correlation between attitude score versus practice towards EBP with correlation coefficient rs = 0.955.

CONCLUSIONS

The study showed that nurses had an average level of EBP knowledge, attitude and practice skills in terms of EBP.

Nurses with university degrees have a higher average score on EBP knowledge than college nurses. Nurses who have participated in scientific research have a higher mean score of EBP knowledge, attitudes and skills than nurses who have never participated in scientific research.

Gender, age group, qualification, length of service and training in EBP affect nurses' perceptions of EBP.

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