

# Factors Related to Practice, Attitude and Skill of Nurses to Evidence Based Practice in the Hospital

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## ABSTRACT

**Background.** Evidence based practice in nursing is an implementation method of patient care to improve the patient quality of care. The understanding and implementation of evidence based practice in nursing practice in Indonesia needs to be improved. **Aim.** The objective of the study was to determine factors related to practice, attitude and skill of nurses to evidence based practice in the hospital. **Method.** This study was done through distributing Evidence Based Practice questionnaire to 134 nurses from hospitals at Jakarta whom attended evidence based practice seminar. The data was analyzed using chi square analysis test and utilized descriptive correlative study in quantitative research. **Result.** The result showed that most of respondents are dominated by female (91.8%), 53.7% with age less than 35.5 years old, with last educational attainment of Diploma III of Nursing (70.1%) and the graduation year were after 2008 (57.5%). The proportion of 50.7% respondents were frequently practicing and have good attitude to evidence based practice as well as the skills related to it. There was no relationship between age, sex, educational attainment and graduation year to attitude, practice and skill of nurses except only educational attainment related to respondent skill in evidence base practice ( $0,002 < 0,005$ ). **Conclusion.** The practice, skill and attitude of nurses to Evidence Based Practice in the hospital in Indonesia need to be improved. It is recommended for nurses to improve the knowledge and skill related to evidence based practice and integrate it in the educational curriculum.

**Keywords:** Evidence based practice, Attitude, Skill, Nurse

## 1. INTRODUCTION

The implementation of recent nursing methods needs to be improved; where many nurses feel convenient in using routine procedure compared to best evidence to be used in the practice. Evidence based practice is an ideal problem solving approach and referring to the implementation of best research, so that the use of updated care and better decision making could be done by health professional<sup>[1]</sup>

Evidence based practice in nursing field is a method of implementation the recent patient care and facilitating nursing quality in caring for the patient<sup>1</sup> Further benefit of evidence based practice is the decrease of length of stay and intervention so that the hospitalization fee decreased<sup>2</sup>. WHO recommended the use of evidence based practice to improve the capacity of the countries to develop evidence based health policy. This is important in supporting European policy framework and giving good example to other countries to use evidence in health policy<sup>[3]</sup>.

The use of evidence based practice in health care has been implemented in most hospitals in Europe,

Australia, USA and also Asia especially in Taiwan, with the curriculum of evidence based practice in the college<sup>[1]</sup> In Indonesia, the utilize of evidence based practice study is acknowledged in the Act of Republic Indonesia number 38 year 2014 about nursing verse 2 point b, with the emphasis of nursing practice should be based on the science based on knowledge and technology retrieved from the research, education as well as clinical practice experience<sup>[4]</sup>. There were only a small portion of nurses in Indonesia use evidence based practice in their nursing practice<sup>[5]</sup>. Lots of nurses' decision based on personal experience and assumption as well as personal skill. Although nurses realized the importance of evidence based practice, they prefer to have discussion with their peer than reading or searching research or study<sup>[1]</sup>.

Evidence Based Practice in Nursing (EBPN) is a problem solving in health care by integrating the best evidence from many studies and also findings from patients by considering clinical expertise and patients' preferences and also caring values and organizational culture to produce a quality service. Evidence based practice has been popular since 20<sup>th</sup> century and

predominantly in the field of policy, management, education, in the health service<sup>[6]</sup>.

Nurses have to use the recent evidence in giving the best care<sup>[7]</sup>. Nursing care based on research is better than routine procedure learned before. This evidence will help nurses in decision making; implementing nursing action and also interacting with the patients. EBP is aimed to give a quality care; improve patient output, decrease hospitalization fee and improve nursing satisfaction in giving nursing care<sup>[8]</sup>. Although EBP is integrated in the curriculum, the barrier in the implementation is lack of nurse ability in using the computer and internet<sup>[14]</sup>.

Some research result related to EBP in Indonesia showed lack of understanding, practice and attitude of EBPN in Indonesia. Study nurses' awareness and effect of EBP to nursing care quality. The study showed that EBP has not integrated in the nursing culture in Indonesia; lack of EBP knowledge among nurses' staff and there is a need to develop EBP guidelines for stroke patients in the national brain hospital. There is a need to follow up the guidelines provided in the next 3-6 months through further discussion among nurses<sup>[3,9]</sup> stated that the use of EBP guidelines based on clinical pathway from assessment to evaluation showed a significant improvement of nursing care quality as in the whole nursing process.

Oktiyuliandri<sup>[10]</sup> found that most nurses lack in understanding EBP (49%); only 6.1% resembling good knowledge and 59.2% with good attitude of EBP. Ligita<sup>[11]</sup> in a hospital at Pontianak found out only 30.3% of nurses know about EBP through educational process or literature reading while majority said that they do not have enough preparation in research or reading research. More than 50% have positive attitude for EBP. They used to have discussion with other team members especially with head nurse (86.4%) and also with doctors. Most of them is not using research evidence in nursing practice with obstacle in using foreign language (77.3%) and limited knowledge of EBP (48%). The enabling factors are education level (83.3%), computer skills (77.3%), literature retrieve skill (71.2%) and good attitude for EBPN (66.6%). The practice of nursing requires critical thinking and clinical reasoning to define a client's problem, examine the evidence-based practice in caring for the client, and make choices in the delivery of care<sup>[12]</sup>. Considering nurses as frontline in hospital service and the need of EBP to be implemented in the nursing care; as well as low number of EBP implementation in Indonesia; this study aimed to investigate factors related to practice, skills and attitude of EBPN in the hospital.

**2. METHODS**

This study utilized a descriptive-correlation design with cross-sectional approach. Respondents were recruited from the participants who attended EBPN seminar in 2018. Using accidental sampling method, 135 respondents served as the sample of the study. Instrument used in the study was Evidence Based Practice questionnaire distributed to the respondents to be filled up. The Upton and Upton's EBPN<sup>[15]</sup> is utilized to measure the perception of health workers on

their EBP's knowledge, attitude and practice. The translation and reliability test was conducted on 2018. The Cronbach's of total items valued 0.92 with 0.81, 0.74 and 0.94 for practice, attitude, and knowledge, respectively. Thus, a total of 24 reliable questions were finalized in this version<sup>[13]</sup>.

**3. RESULT**

Table 1 showed the demographic profile of the respondents included in the study. Most of them are female (91,8%) as profession of nurses are dominated by female; with the educational background most from Diploma III in Nursing; which is a general picture of educational attainment in nursing professionals in Indonesia are dominated with Diploma III in Nursing. Most of the respondents aged less than 35.5 years old (53.7%) and graduated after 2008 (57.5%). This showed the young generation of nurses (within 10 years after graduation).

Table 1. Demographic Profile of Respondent

Variable	F	%
Sex		
Male	11	8.2
Female	123	91.8
Education		
Diploma III	94	70.1
BSN/Master	40	29.9
Age		
<35.5 years	72	53.7
>35.5 years	62	46.3
Graduation year		
Before 2008	57	42.5
After 2008	77	57.5

Table 2 showed the practice, skill and attitude of EBPN. Most of the respondents resembled good practice, skill and attitude of EBPN (50.7%). This percentage actually is not dominating because almost half of them were also perceived that they lack on EBPN skill, attitude and practice.

Table 2. Frequency Distribution of Practice, Skills and Attitude of EBPN

Item	Practice	%
Practice		
Less	66	49.3
Frequent	68	50.7
Attitude		
Less	66	49.3
Good	68	50.7
Skill		
Less	66	49.3
Good	68	50.7

It is explained then in the next table about specification item questionnaire of each practice, attitude and skill of EBPN. Table 3 showed 56.8 to 65.7% of respondent frequently practicing EBPN. The percentage is not too dominating indicating that there is a need to increase the

practice of EBPN.

Table 3. Frequency Distribution of practice item questionnaire of EBPN

Statement	F	%
Providing easy question to fill the gap		
Seldom	58	43.2
Frequent	76	56.8
Retrieve evidence relevant to question posed		
Seldom	56	41.7
Frequent	78	58.3
Critical appraisal for source supporting evidence		
Seldom	47	35.0
Frequent	87	65.0
Integrating evidence with preferences		
Seldom	57	42.5
Frequent	77	57.5
Evaluate result of the practice		
Seldom	52	38.8
Frequent	82	61.2
Share information to colleague		
Seldom	46	34.3
Frequent	88	65.7

In terms of attitude in EBPN, table 4 showed positive attitude of EBPN in terms of finding new evidence though too much workload and also not resistant in questioning clinical practice. While half of the respondents feel that EBPN is wasting time. They thought of some works better to do than EBPN. And lastly, only 41.1% respondents prefer to use new evident, while most of them prefer to use the routine one. This showed the eagerness to change; and not overcoming the best evidence given.

Table 4. Frequency Distribution of Attitude item questionnaire of EBPN

Statement	F	%
Too much workload makes difficult in finding new evidence		
Negative	61	45.5
Positive	73	55.5
Resistance in clinical practice to be questioned		
Negative	53	39.5
Positive	81	60.5
EBPN is wasting time		
Negative	67	50.0
Positive	67	50.0
Prefer to use reliable and usual method compared to new one		
Negative	79	58.9
Positive	55	41.1

The capacity of respondents' skill in the EBPN needs to be improved since half of them lack of skill in research, changing informational need into research question and

sharing the idea or information with colleague. The routine and busy work could be a challenge for this; while they prefer to accomplish daily activities in nursing care. Motivation, support and also time management are needed to overcome those condition. The remaining skills were in the range of 50-62.7% and there is a need for improvement.

Table 5 Frequency Distribution of Skill item questionnaire of EBPN

Statement	F	%
Research skill		
Less	67	50.0
More	67	50.0
Information Technology skill		
Less	60	44.7
More	74	55.3
Monitor and assess clinical skill		
Less	63	47.0
More	71	53.0
Changing informational need to research question		
Less	68	50.7
More	66	49.3
Awareness in the main source of Information		
Less	52	38.8
More	82	61.2
Ability to identify gap in professional practice		
Less	59	44.0
More	75	56.0
Knowledge of retrieving evidence		
Less	51	38.0
More	83	62.0
Ability to analyze evidence based on standard		
Less	54	40.3
More	80	59.7
Ability to determine validity of information or evidence		
Less	50	37.3
More	84	62.7
Ability in putting information in individual case		
Less	50	37.3
More	84	62.7
Sharing idea and information with colleague		
Less	78	58.2
More	56	41.8
Disseminating new idea of careof service quality to colleague		
Less	52	38.8
More	82	61.2
Ability to assess clinical skill		
Less	48	35.8
More	86	61.2
Ability to determine clinical significance of information or		
Less	52	38.8
More	82	61.2

**4.2 Bivariate Analysis**

In table 6 of chi square, there was no relationship between sex, education, graduate and age with practice of EBPN. Practice of EBPN is supposed to be done for nurses in their daily activities.

Tabel 6. Chi-Square table between sex, age, education and graduating year with practice of EBPN

Variabel	Practice of EBPN		P Value
	Less	Frequent	
Sex			
Male	4 (36%)	7(63.6%)	0.372
Female	62 (50.4%)	61 (49.6%)	
Education			
BSN/Master	18 (43.9%)	23 (56.1%)	0.411
Diploma III	48 (51.6%)	45 (48.4%)	
Graduate			
Before 2008	32 (58.2%)	23 (41.8%)	0.112
After 2008	34 (44.2%)	43 (55.8%)	
Age			
<35.5 y/o	34 (48.6%)	36 (51.4%)	0.797
>35.5 y/o	31 (50.8%)	30 (48.2%)	

Table 7 showed chi square result of no relationship between age, sex, education and graduating year with attitude of EBPN. Nurses are supposedly have positive attitude regarding EBPN.

Tabel 7. Chi-Square table between sex, age, education and graduating year with attitude of EBPN

Variabel	Attitude of EBPN		P Value
	Negative	Positive	
Sex			
Male	6 (54.5%)	7(63.6%)	0.714
Female	60 (48.8%)	61 (49.6%)	
Education			
BSN/Master	15 (36.6%)	26 (63.4%)	0.051
Diploma III	51 (54.8%)	42 (45.2%)	
Graduate			
Before 2008	29 (58.2%)	23 (41.8%)	0.112
After 2008	34 (49.2%)	43 (55.8%)	
Age			
<35.5 y/o	34 (48.6%)	36 (51.4%)	0.945
>35.5 y/o	30 (49.2%)	31 (50.8%)	

The skill of EBPN is related with educational attainment (p value=0.002) while not related with sex, age and graduation year. The percentage of BSN/Master in Nursing graduate (65.9%) is more frequent in implementing the skill of EBPN compared to Diploma III graduate. The nursing education system in Indonesia has inserted the EBPN in the curriculum especially in the graduate program; and introduce the capacity of EBPN skill in the undergraduate (BSN) program.

Tabel 8. Chi-Square table between sex, age, education and graduating year with skill of EBPN

Variabel	Skill of EBPN		P Value
	Lack	Frequent	
Sex			
Male	7 (63.6%)	4 (36.4%)	0.319
Female	59 (48.0%)	64 (52.0%)	

Education			
BSN/Master	14 (34.1%)	27 (65.9%)	<b>0.002</b>
Diploma III	52 (55.9%)	41 (44.1%)	
Graduate			
Before 2008	31 (56.4%)	24 (43.6%)	0.112
After 2008	34 (49.2%)	43 (55.8%)	
Age			
<35.5 y/o	32 (45.7%)	38 (54.3%)	0.441
>35.5 y/o	32 (52.5%)	29 (47.5%)	

In the recent years, there are still some schools open for Diploma III program while the standard is supposed to be BSN program with professional clinical practice program for one year. In the BSN program, capacity for EBPN is improved through research program as final assignment before graduation. It is also the same with graduate program with their thesis final assignment. BSN and Master program are required to conduct evidence based practice in the nursing education through retrieving nursing research or article for knowledge and skill aspect; while for skill aspect; they are asked to have laboratory or clinical practice and find out rationale base for the procedure or intervention done to the patients through EBPN. Nurses in the hospital with graduate level of BSN or master are also required to share their research findings and learning in a small case about EBPN.

**4. CONCLUSION**

The skill, practice and attitude of nurses in the hospital in Indonesia toward EBPN is still the on the process to reach ideal condition. EBPN will benefit nurses as well as the patients in improving the quality of nursing care. Educational attainment has a significant role in determining the skill, practice and attitude of nurses toward EBPN.

**RECOMMENDATION**

Indonesian nursing education system needs to improve more on EBPN to the nursing curriculum as early as Diploma III program. It could be started through introducing the use of EBPN in a simple way, while the more educational level increased; the more EBPN skill are practiced to shape on their attitude toward EBPN. The environment of EBPN needs to be cultivated in the hospital.

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