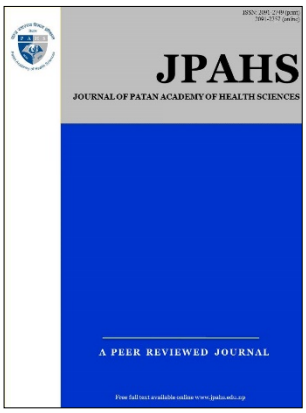

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Knowledge and attitude toward evidence based practice among nurses of a tertiary care teaching hospital, Nepal

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Abstract

Introductions: Evidence Based Practice (EBP) raises the standard of nursing practice. The objective of this study was to assess knowledge and attitude toward EBP among nurses of Patan Hospital, Patan Academy of health Sciences (PAHS), Nepal.

Methods: This was a cross-sectional study conducted from 12th August to 7th September 2018. Convenience sampling was used to select nurses with bachelor degree in nursing, working at Patan Hospital, PAHS, Nepal. Data were collected using self-administered semi-structured questionnaire to find out knowledge and attitude of nurses towards EBP.

Results: Out of 125 nurses participated, 61 (48.8%) had average level of knowledge, 19 (15.2%) had good knowledge and 45 (36.0%) poor level of knowledge of EBP. Positive attitude toward EBP was found in 123 (98.4%). There was weak positive (r = 0.263) relationship between knowledge and attitude of EBP.

Conclusions: Nearly half of the nurses had an average level of knowledge regarding EBP, and nearly all had positive attitude toward it.

Keywords: attitude, evidence based practice, knowledge, nurses

Introductions

Health care is a dynamic discipline with researches aiming to improve practice by the use of innovative interventions based on evidences.[1] Evidence Based Practice (EBP) is the conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients.[2]

Incorporation of EBP competencies into health care leads to higher quality of care and improved patient outcomes. The EBP provide nurses with best research evidences to deliver effective health care.[3,4]

There are multiple challenges that prevent implementation of EBP. Studies report that most nurses have positive attitude regarding EBP, but lack necessary knowledge of the EBP process.[1,3,5-7]

This study aims to find out the knowledge and attitude toward EBP among nurses of Patan Hospital, a tertiary care university teaching hospital, Nepal.

Methods

A cross-sectional study was carried out at Patan Hospital, a tertiary care university teaching hospital of Patan Academy of health Sciences (PAHS), Lalitpur, Nepal between 12th August to 7th September 2018. A self-administered structured questionnaire was used. It contained open and closed ended questions. Question related to knowledge was self-developed by the researcher based on the review of literature, consulting research advisor and subject teacher. Attitude of EBP was assessed using a tool developed and validated by Majid, 2011.[1] The instrument was modified as per research objective and according to the present local context with permission from the author. Pre-testing of the instrument was done in 10% of the total sample size among nurses of Post-partum ward. The respondents included in pretesting were not included in data collection for the study. The internal consistency of the instrument was measured by using Cronbach's alpha test. The instrument used for the study was reliable as demonstrated by the result of Cronbach's alpha test that is 0.79.

Questionnaire consisted of three parts, demographic variables, knowledge of EBP and attitude of EBP

Nurses with bachelor degree in nursing were included in the study. The selection of participants was based on convenience and availability. The total number of nurses with bachelor degree at the Patan Hospital, PAHS at the time of study was 185, and since, the data collection period was only one month, due to time constraints sample size for the study was 125 nurses.

Ethical approval from Institutional review committee (IRC) of PAHS was obtained. Permission was obtained from concerned authority of Patan Hospital before data collection. Nursing personnel fulfilling the inclusion criteria was explained about the study. A verbal and written consent was taken consequently. Data was collected by researcher herself. The time selected for data collection was 10:30 am-3:30 pm. Nurses were provided questionnaire to complete it during their free time and return on the same day. The average time required to complete the questionnaire was 30-45 minute, 3-6 respondents were included per day.

The data was analysed using Statistical Package for Social Sciences (SPSS).

Results

Out of total of 125 nurses in the study, mean age was 30.85±5.22 years, 57 (45.6%) in the age category of 26-30 years. Ninety-four (75.2%) of the respondents had with bachelor degree in nursing and were staff nurse registered in Nepal Nursing Council. Year of experience in nursing was 9.69±5.13 years, 57 (45.6%) had ≤8 years' experience, 39 (31.2%) were working in the critical care units; 82 (65.6%) had learned about EBP among which 69 (84.2%) during their nursing course, Table 1.

Ninety-two (73.6%) answered correctly about the components of EBP, 56 (44.8%) knew formulating a clear question based on a clinical problem is the first step in EBP and 66 (52.8%) mentioned that systemic review is preferred for decision making in EBP. Eighty-six (68.8%) responded that human source is the most reliable information source for EBP whereas, 65 (52%) internet as reliable source of information. Fifty-four (43.2%) responded that they have heard about the critical appraisal of research evidences, 115 (92.0%) responded that one of advantage of EBP is to provide high quality care, Table 2.

The attitude regarding EBP, 73 (58.4%) agreed that they like using research evidences in their clinical practice, 63 (50.4%) preferred more traditional methods instead of changing to new approaches, 40 (32%) neither agreed nor disagreed about relevancy of research articles in their clinical practice, Table 3.

Regarding perceived barriers to adopt EBP, 67 (53.6%) believed inadequate understanding of research terms used in research articles as the barrier, 58 (46.4%) believed inability to understand statistical terms, 78 (62.4%) had difficulty in judging the quality of research and 59 (47.2%) unable to properly interpret the result of research studies, 59 (47.2%) unable to implement recommendations of research studies into clinical practice, 56 (44.8%) insufficient time to implement changes and 64 (51.2%) believed there is insufficient resource to implement EBP, Table 4.

Table 1. Demographic characteristics among nurses (n=125) of Patan Hospital, PAHS, to assess the knowledge and attitude toward evidence-based practice (EBP)

Variables	Frequency	Percent
Age in years		
≤25	14	11.2
26-30	57	45.6
31- 35	30	24
≥36	24	19.2
Mean±SD: 30.85±5.22		
Designation		
Sister in-charge	8	6.4
Senior Staff Nurse	23	18.4
Staff Nurse	94	75.2
Total experience in nursing		
≤8 years	57	45.6
9-16 years	56	44.8
17-24 years	10	8
≥25 years	2	1.6
Mean±SD: 9.69±5.13		
Current working departments		
Medical departments	29	23.2
Surgical departments	24	19.2
Pediatric departments	16	12.8
Critical departments	39	31.2
Other departments	17	13.6
Learned about EBP		
Yes	82	65.6
No	43	34.4
Medium of learning EBP (n=82)		
Nursing course	69	84.2
Continue nursing education	11	13.4
Training	1	1.2
Others	1	1.2

Note: PAHS- Patan Academy of health Sciences is a deemed university, ministry of health, Nepal

Table 2. Knowledge of EBP among nurses (n=125) of Patan Hospital, PAHS, Nepal

Variables	Frequency	Percent
Best research practice, clinical expertise, role modelling	9	7.2
Best research evidence, clinical expertise, patient needs and Values	92	73.6
Clinical expertise, patient needs, personal experience	17	13.6
Patient needs, role modelling, best research practice	7	5.6
First step in EBP		
Apply result in practice	22	17.6
Critically appraise the evidences	18	14.4
Formulate a clear question based on a clinical problem	56	44.8
Systematically retrieve the evidences	29	23.2
Preferred study for decision making in EBP		
Case control studies	21	16.8
Result from a single experimental study	26	20.8
Result from a single descriptive study	12	9.6
Systemic review for multiple randomized clinical trials	66	52.8
Most reliable information sources for EBP [a]		
Printed source	64	51.2
Internet source	65	52
Human source	86	68.8
Online tutorials	68	54.4
Heard about critical appraisal of research evidence		
Yes	54	43.2
No	71	56.8
Meaning of critical appraisal (n=54)		
Evaluating guideline	3	5.6
Evaluating strength of evidences	37	68.5
Experts opinion	6	11.1
Knowledge transformation	18	14.4
Advantages of EBP [a]		
To improve patient outcome	103	82.4
To eliminate unsound clinical practices	62	49.6
To provide high quality care	115	92
To reduce health care cost	56	44.8

Note: multiple responses [a]

Table 3. Attitude of respondents regarding EBP Knowledge among nurses (n=125) of Patan Hospital, PAHS, Nepal

Attitude	SD n (%)	D n (%)	NA/ND n (%)	A n (%)	SA n (%)	Mean±SD
I like using best research evidences in my clinical practice	5 (4.0)	2 (1.6)	2 (1.6)	73 (58.4)	43 (34.4)	4.18±0.87
I prefer using more traditional methods instead of changing to new approaches	45 (36.0)	63 (50.4)	10 (8.0)	5 (4.0)	2 (1.6)	1.85±0.85
Most research articles are not relevant to my daily practice	9 (7.2)	33 (26.4)	40 (32.0)	39 (31.2)	4 (3.2)	2.97±0.99

Note: SD=strongly disagree, D=disagree, NA/ND=neither agree nor disagree, A=agree, SA=strongly agree

Attitude regarding perceived factors important to adopt EBP, 50 (40.0%) said job requirement, 58 (46.4%) training, 49 (39.2%) time and 43 (34.4%) access to a system for literature search, and 47 (37.6%) believed mentoring important factor to adopt EBP, Table 5. The study showed weak positive (26.3%) interrelationship between knowledge and attitude of EBP among nurses. The two tailed Pearson Correlation showed statistically significant relation at the significance level of 0.01 (p value: 0.003).

Table 4. Attitude regarding perceived barrier to adopt EBP among nurses (n=125) of Patan Hospital, PAHS, Nepal

Attitude statements	SA n (%)	D n (%)	NA/ND n (%)	A n (%)	SA n (%)	Mean±SD
Inadequate understanding of research terms used in research articles	4 (3.2)	32 (25.6)	21 (16.8)	67 (53.6)	1 (0.8)	3.23±0.95
Inability to understand statistical terms used in research articles	2 (1.6)	38 (30.4)	16 (12.8)	58 (46.4)	11 (8.8)	3.30±1.04
Difficulty in judging the quality of research papers and reports	3 (2.4)	22 (17.6)	16 (12.8)	78 (62.4)	6 (4.8)	3.50±0.92
Inability to properly interpret the result of research studies	1 (0.8)	38 (30.4)	22 (17.6)	59 (47.2)	5 (4.0)	3.23±0.96
Inability to implement recommendations of research studies into clinical practice	1 (0.8)	36 (28.8)	21 (16.8)	59 (47.2)	8 (6.4)	3.30±0.98
Insufficient time at work place to implement changes in their current practice	1 (0.8)	23 (18.4)	18 (14.4)	56 (44.8)	27 (21.6)	3.68±1.03
Insufficient resources to implement EBP	3 (2.4)	12 (9.6)	7 (5.6)	64 (51.2)	39 (31.2)	3.99±0.98

Note: SD=strongly disagree, D=disagree, NA/ND=neither agree nor disagree, A=agree, SA=strongly agree.

Table 5. Attitude regarding perceived factors important to adopt EBP among nurses (n=125) of Patan Hospital, PAHS, Nepal

Attitude statement	NI, n (%)	LI, n (%)	I, n (%)	VI, n (%)	EI, n (%)	Mean±SD
Job requirement	2 (1.6)	6 (4.8)	48 (38.4)	50 (40.0)	19 (15.2)	3.62±0.85
Adequate training in EBP	0 (0)	2 (1.6)	24 (19.2)	41 (32.8)	58 (46.4)	4.24±0.81
Adequate time in work place to conduct EBP	0 (0)	4 (3.2)	35 (28.0)	49 (39.2)	37 (29.6)	3.95±0.84
Access to a system for extensive/comprehensive literature searching	0 (0)	8 (6.4)	41 (32.8)	43 (34.4)	33 (26.4)	3.81±0.90
Mentoring by nurses who have adequate EBP experience	2 (1.6)	3 (2.4)	41 (32.8)	47 (37.6)	32 (25.6)	3.83±0.89

Note: NI = not important, LI = least important, I = important, VI = very important, EI = extremely important

Discussions

The result of the study indicates that the nurses had a very positive attitude 123 (98.4%) toward EBP. However, the result of the study reflected inadequate knowledge and skills to apply EBP. Study reports nurses in Singapore, despite of having a positive and supportive attitude of EBP, lacked competence and knowledge, and more training was seen as an important means of facilitating adoption of EBP.[5] The study by Karki S reports that nurses had positive attitudes towards EBP, however, their knowledge and skills were limited and 93% had no previous training in EBP.[6] The study identified the nurses difficulty in judging the quality of research papers and reports as a major barrier to EBP. Similarly, the study identified that nurses perceived adequate training is an important factor to adapt to EBP. This study necessitates a possible need for improving the nurse's knowledge and skills regarding EBP, for example, through Continue Nursing Education (CNE) on EBP and training. A favorable organizational environment might be equally important to remove the barriers to implement EBP in nursing practice. This is supported by study from Nepal in 2014 that inability to understand research report and lack of knowledge was the major barrier for adopting and implementing EBP.[8]

This study finding demonstrated that fifty-eight (46.4%) nurses perceived that training is an important factor to adopt EBP and 36 (28.8%) believed that receiving training in EBP

is necessary to understand research and statistical terms and methods. Study from Nepal in 2015, found that nurses do have positive attitude toward EBP, however, they lacked necessary knowledge and skills to adopt it and 93% of them had no previous training in EBP.[6]

The finding of the present study showed no association of demographic variable like age, designation, total work experience in nursing with the level of knowledge and attitude regarding EBP.

Some of the limitations of this study include, content validity of the instrument was not maintained due to time constraint, therefore the scope of coverage of the content may not be adequate. The study was limited to nurse of a single teaching hospital, and convenience sampling without randomization may not be generalized in other settings.

Conclusions

Based on the findings of the study, it is concluded that nearly half of nurses had average level of knowledge regarding EBP while majority of the nurses had positive attitude toward EBP.

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Conflict of Interests

None

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