Barriers and Facilitators for Implementing Evidence Based Practice among Nurses at Yanbu General Hospital - kingdom of Saudi Arabia

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Abstract: Evidence-Based Practice (EBP) is one of the most important developments in decades for the helping professions-including medicine, nursing, social work, psychology, public health, counseling, and all the other health and human service professions. *The study aims* to assess barriers and facilitators for implementing evidence –based practice among nurses in Yanbu General Hospital. *Subjects &Methods:* A descriptive cross sectional design uses in carrying out this study at Yanbu General Hospital located in Yanbu AlBaher, AlMadinah AlMunawarah, kingdom of Saudi Arabia. Participants are all the nurses working both full-time and part-time in Yanbu General Hospital. *Outcome measure:* Three outcomes assessed at barriers and facilitators for implementing evidence-based practice among nurses, (1) Nurse Assessment Sheet; it includes(a) Socio-demographic characteristics of nurse such as (age, sex, nationality, valid professional license, educational level, and place of working in hospital); (b) Communication characteristic to assess communication between nurses and hospital organization and evaluate barriers and facilitators for implementing evidence based practice in hospital; (2)Barrier of evidence based practice questionnaire; and *(3)* Facilitators for implementing evidence based practice questionnaire. *Results:* barriers of evidence based nursing related to knowledge (68.8%), practice (70), authority (72%), setting (70.7%) and research utilization (72%) while facilitation for EBN are 28.7%. the finding of the study reveals that highly statistical significant correlation between gender of nurses and evidence based nursing, highly statistical significant correlation between barrier and facilitators of evidence based practices. *Conclusion;* the findings of the present study can help nurses to identify barriers and implement strategies to promote EBP as part of quality improvement. *Recommendation;* Continuous in-service educational program should be hold for all staff nurses to improve practical of evidence based nursing.

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1.Introduction

Evidence-based nursing is defined as the integration of best research evidence with clinical expertise and patient values and the conscientious, explicit, and judicious use of such evidence in making decisions about the care of individual patients***(Sackett, 2000)***.The definition of evidence based nursing pointed that, nurses are committed to provide holistic care by working with patient, as he is a part of the decision making process, in order to reach the effectiveness of treatment by deciding on therapeutic interventions that are acceptable to the patient and at the same time cost-effectiveness ***(McSherry, 2002).***

Practice evidence-based nursing, clinical nurses need effective strategies for extracting relevant information from the many publications that are currently available. The quality of information that nurses demand and how effectively they evaluate and use it for clinical decision making will influence patient outcomes and, ultimately, the part nurses play in the delivery of health care***(Royle, 1998)***. EBNP refers to the application of the best evidence in clinical decision-making by integrating clinical expertise with recent research findings, while taking into consideration the values and preferences of patients ***(Coopey, 2006).***

The EBNP process consists of five stages: (1) formulating a question that will yield the most suitable answer; (2) gathering the most relevant information by systematic search of the literature or clinical guidelines; (3) performing critical evaluation of the evidence and its validity, relevance and feasibility; (4) integrating research evidence with clinical experience, patients' values and preferences and (5) assessing treatment outcomes ***(Melnyk, 2005).***

The researches findings are used by nurses in practice was impeded or facilitated by many factors, which occur at the individual, organizational or institutional levels, or due to qualities of the researches, in addition to the presentation ability and accessibility of the research ***(Solomons, 2011)***. At the level of individual, the nurse's research values, skills, and Awareness play significant role in implementing evidence based in practice.

The consensus on the importance and benefit of EBNP, along with evidence that actual implementation of EBNP is rare, has generated

efforts to develop strategies to facilitate dissemination of EBNP at the organizational and individual levels. It developed a model to identify variables influencing the implementation of EBNP and found the organization to be the most important factor***(Mashiach, 2011).***

Barriers to evidence-Based nursing practice.

There are many barriers to successful adoption of EBNP in the workplace. They fall into three categories: the individuals, the organization and environmental***(Udod, 2004)***.there are major barriers to developing EBCPGs in hospitals. These include lack of time, skills, information technology(IT) infrastructure and access to research. These barriers reflect and build on those identified by other researchers***(Turner, 2009)***.Limited Nurses' precursor skills for developing evidence-based practice, such as database searching and information retrieval may be insufficient, insufficient time to find and read research reports and lack of comfort level and initiative ***(Bertulis, 2008; Yadav, 2012).***In addition to negative attitudes, lack of training, and confusion between evidence based practice and its products ***(Pagoto, 2007)***.

At the organizational or institutional level, the perceived barrier can be summarized as: difficulty accessing evidence as limited access to library resources, lack of knowledge of how to navigate complex databases are major barriers to locating and utilizing evidence in practice, lack of access to computers on nursing units; resources constraints as staggering patient workload and the nursing shorting pose notable limitations on nurse time; at last skill development and management priorities***(Udod, 2004).***

The main barriers to research utilization identified by the respondents were: the fact that most research is published in a foreign language; that physicians will not co-operate with implementation; and that statistical analyses are difficult to understand***(Oranta, 2002).***

Internal and external barriers:

Internal factors are those that exist within the practitioner, such as knowledge of clinical practice guidelines, attitudes about the practice change, and motivation or lack of motivation to do so. External factors are those that exist outside the practitioner. These might be intrinsic to a patient case, the work environment, the organization, or the guideline itself***(Abrahamson, 2012)***.

Facilitators to evidence-Based nursing practice.

The facilitators mentioned most often were nurses' positive attitudes and abilities. Other important facilitators included the support and activity of a ward sister as well as encouragement, a favorable attitude and collaboration on the part of all staff members***(Oranta, 2002).***

Facilitators to guideline use among nurses have also been identified. internal facilitators: (attitude-based)includes perceived need for decision support and Flexibility/willingness to change practice; external facilitators: (Attitude-based)includes teamwork, medical staff support, perception of guideline accuracy, perception of guideline usability, administrative support; (knowledge-based)includes education/orientation/training and communication. (Organizational characteristics) includes budget/ resources, time/ staffing/ workload, technology, reminders, availability of CPGs , staff input, nurse input, provider accountability and general organizational climate toward evidence based nursing***(Abrahamson, 2012)***.

Facilitators on the organization level were, improved access to computers and Internet facilities in the workplace, more effective research training, and collaboration with academic nurses***(Chang, 2010).***

While on the other hand improving facilities for accessing evidence and promoting more user-friendly resources to address time constraints appear to be the frequently reported facilitators to evidence based-practice ***(Lai, 2010)***.

Historically, there has always been a drive to bridge the gaps between practice and research ,which can be achieved through the application of evidence based in order to facilitate staff development and organizational change, thereby helping to close the gap from research to practice***(Turner, 2009)***.

Significance of study:-

Nurses should integrate research findings in their routine practice for several reasons: First of all, the use of healthcare interventions without an evidence base increases healthcare costs without positively impacting patient care outcomes ***(Leufer, 2009).***Evidence-based practice also provides opportunities for nursing care to be more individualized, more effective, streamlined, and dynamic, and to maximize effects of clinical judgment. When evidence is used to define best practices rather than to support existing practices, nursing care keeps pace with the latest technological advances and takes advantage of new knowledge developments. Evidence-based practice (EBP) positions nurses to be a significant influence on health-care decisions and a partner in improving quality of care. Today, nursing interventions and processes informed by the best evidence are critical to realizing health-care improvements and cost savings***(Youngblut, 2001).***

The knowledge that will be gained from this study will add to the body of knowledge about the barrier and facilitators that affect or enhance the implementation of evidence based practice among nurses. This knowledge also can be integrated within nursing, midwifery, and other health professional curricula, to enable graduates to achieve a culturally competent care.

Aim of the study:

The aim of this study was to assess barriers and facilitators for implementing evidence –based practice among nurses in Yanbu General Hospital.

Research Question

- What are barriers for implementing evidence – based practice among nurses in Yanbu General Hospital?
- What are facilitators for implementing evidence – based practice among nurses in Yanbu General Hospital?
- What are the correlation between barriers and facilitation of evidence based practice?

2.Subjects & Methods

The present study was carried out to assess barriers and facilitators for implementing evidence –based practice among nurses in Yanbu General Hospital. The following methodology pursued in conducting the study was described under technical, operational, administrative, and statistical designs.

I. Technical Design

This would involve a description of the study design, settings, as well as study subjects and sampling, and the data collection tools.

Research Design:

A descriptive cross sectional design was used in carrying out this study.

Setting:

The study was conducted at Yanbu General Hospital located in Yanbu AlBaher , AlMadinah AlMunawarah, Kingdom of Saudi Arabia .

Subjects:

Participants for the study were all the nurses working both full-time and part-time in Yanbu General Hospital. At that time the hospital utilized 300 beds and approximately 230 nurses worked in the hospital. The returned completely filled questionnaire was 157 Therefore response rate was 68.3%.

Inclusion criteria included Registered Nurse and Qualified Nurse

Exclusion criteria included training nurses and student nurses.

Tools of data collection:

1. ***Nurse Assessment Sheet;*** it is constructed by the researchers after reviewing the literatures ***(Panagiari, 2008).***It includes

a) Sociodemographic characteristics of nurse such as (age, sex, nationality, valid professional license, educational level, and place of working in hospital).

b) Communication characteristic to assess communication between nurses and hospital organization and evaluate barriers and facilitators for implementing evidence based practice in hospital, it include (how often do look for information, research, or evidence to support nursing practice, information resources in working place and research activities and paper in hospital).

Scoring system; nurse's assessment sheet present number and percentage in table**.**

2. **Barrier of evidence based practice questionnaire*:***

It is constructed by the researchers after reviewing the literatures ***(Bennett, 2003; Majid, 2011)***and modified and translated by the researchers. It includes 27itemsasked about barriers related to knowledge, practice, authority, setting, and research utilization. It is a Numeric Rating Scale (NRS) in which five core quality indicators were recommended to provide measurement of barriers for implementing evidence based nursing practice. Including (1) strongly disagrees; (2) disagree; (3) neutral; (4) agree; and (5) strong agree.

Scoring system:

☑ For the five items relating to barriers of EBP, we accorded each response a rating in ascending order of confidence, from a minimum of one to the maximum rating depending on the number of options in the Likert Scale. We reported the mean and standard deviation for each item. We also combined the ratings for all five items to form the sum rating, with a maximum sum rating of 27.

☑ Barrier of evidence based practice questionnaire was scoring as two categories were formulated as LQ (The Lower Quartile is the 25th percentile: the smallest number that is at least as large as 25% of the data.)≤ 25^{th} percentile was no barrier and >25^{th} percentile was barrier as the following:-

- Measuring the score for barriers of evidence based nursing practice as regarding to nurse's knowledge includes 5 items and the total scoring was 25 degree, nurses were satisfactory level when they have ≤ 10 degree and unsatisfactory level when > 10degree from total score.
- As regarding to sum practices items was 25 degree. Nurses were utilize research in practice when they have less than 9 degree and unutilized research in practice when more than 9 degree from total score.
- As regarding to authority; it includes4 items and the total scoring was 20 degree. authority support for EBP when they have less than 8 degree and authority not support when more than 8 degree from total score.
- As regarding to setting (hospital); it include 6 items and the total scoring was30 degree. There are setting suitable when they have less than 14degree and setting not suitable when more than 14 degree from total score.
- As regarding to barriers to research utilization; itincludes7 items and the total scoring was35 degree. Nurses were useful from research utilization in EBP when they

have less than 16degree and not useful from research utilization in EBP when more than 16 degree from total score.

3. Facilitators for implementing evidence based practice questionnaire. It is constructed by the researchers after reviewing the literatures ***(Panagiari,2008)*** and modified and translated by the researchers. It includes the 9-item Facilitator Scale to nurses' use of research utilization. This scale Responses were rated from 1 to 5, which displays as (1) strongly disagrees; (2) disagree; (3) neutral; (4) agree; and (5) strong agree.

Scoring system:

- Facilitators for implementing of evidence based practice questionnaire were scoring as two categories were formulated: $\leq 25^{th}$ percentile was no facilitator and$>25^{th}$ percentile was present facilitator for implement as the following: Measuring the score of facilitators for implementing of evidence based nursing practice includes9 items and total scoring was45 degree.

Ii. Operational Design

In the operational design, the pilot study as well as the actual field work or study maneuver would be explained.

Pilot study:

A pilot study was conducted to test the feasibility and applicability of the tools and the maneuvers of the interventions, and to estimate the time consuming. It was carried on 5nurses;these nurses were excluded from the study.

*Content validity was used for modified tools.

Tools content validity ascertained by jury expertise from nursing and medical staff members.

Ethical consideration of the study

To carry out the study, the necessary official approval will be obtained from dean of collage of Applied Medical Sciences Taibahu University in Yanbu and director of Yanbu General Hospital. Oral informed consents were secured from each subject to participate after explaining the nature, purpose and benefits of the study. Subjects wishing at anytime to withdraw from the study, or withhold any information were allowed to do so.

Theoretical Definitions

- *Evidence-based nursing process* (EBNP). EBNP integrates the best research evidence with clinical expertise, patient values, cultural norms and mores, spiritual considerations, and patient preferences in determining the best course of care for the patient.

Study maneuver:

- Written informed consent was obtained
- Data collecting through three shifts (morning 9-12am , afternoon 4-6 pm, and night shift 8-10pm)
- Collecting data take about 30 minutes for once nurse only. Data collection for this study was carried out in the period from March 2012 until May 2012.

Iii. Administrative Design

Written approval was sought fromdean of collage of Applied Medical Sciences Taibahu University in Yanbu and Director of Yanbu General Hospital. Yanbu City - Kingdom of Saudi Arabia.

Iv. Statistical Design:

Data entry and statistical analysis were done using SPSS 16.0 statistical software package. Results were presented as the frequencies, percentage, and Pearson correlation analysis to test statistical significance of some variables and to test effectiveness of the programs. Statistical significance was considered at *p*-value >0.05.

3.Results

Table (1) show that socio-demographic data for nurses, as regarding to gender of subject were (87.9) females and (21.1%) males; while age more than two third (70.7%) between 20-29 years with more than half (56.7%) Saudi nationality and (65.0%) from subjects have diploma related to level of education.

Table (2) shows that professional data for nurses, as regarding to professional license the majority of nurse(93.6%)have license and more than (58.0%)working at 8 hour per shift. As regarding the place of working in hospital included" emergency unit, ICU, surgical, medical, pediatric, gynecological/ obstetric word, operative unit, quality administration, administration word and outpatient clinic are 16.1%,17.2%,19.1%,1.9%,8.9%,4.5%,7.6%, and 15.9%" respectively.

Table (3a) show that communication characteristic in evidence based practices related to look for information, research, or evidences to supporting nursing practice occasionally (37.6%) and often "several times a week" (28.7%).

Table (3b) show that communication characteristic in evidence based practice for research resources as print materials are available (36.9%) while online resources and other information resources are totally unavailable (55.5% and 58.0%) respectively.

Table (4) shows that mean and stander deviation for each item of barriers of evidence based practice related to nurse's knowledge, practice, authority, setting, and research utilization.

Table (5) shows that mean and stander deviation for each item of facilitators of evidence based practice.

Table (6) shows that barrier and facilitator of evidence based practice, there have barriers related to knowledge, practice, authority, setting research utilization and facilitators 68.8, 70.1, 72.0,70.7, 72 and 71.3 respectively.

Table (7):Shows that correlation between gender for nurses with evidence based barrier related to knowledge and practice are highly statistical significant (0.328& 0.306) respectively and nationality with practice – 0.279 at *P*- value ≤ 0.01
Table (8) showed that correlation between barriers and facilitators for evidence based, there are highly statistical significant as regarding to items for barriers of evidence based include (knowledge, practice, authority, setting and research utilization) at *P*= 0.01, while facilitators statistical significant with practice and authority at *P*= 0.05.
Table (9) showed that the correlation between the evidence based barrier and nurses places of work at hospital there are highly statistical significance with practice r =0.214 at *P* value ≤ 0.01 and statistical significance with authority r = 0.191 at *P* = ≤ 0.05)

Table (10) showed that the correlations between knowledge regarding the source of information (Look of research information for evidence based practice, Print material, Outline resources, Other information resources), were not significance (-0.026-, 0.058, 0.084, -0.101-) respectively, also the correlations were not significant between the practice regarding the source of information (Look of research information for evidence based practice, Print material, Outline resources, Other information resources), (-0.060--, -0.106-, -.013-, 0.150) respectively , and between research utilization regarding (Look of research information for evidence based practice, Print material, Other information resources) (0-.139, 0.084, 0.050) respectively , while it was significant only between research utilization regarding outline resources (0.185), at the level of *P*-value ≤ 0.05

Table (1) Socio-demographic data for nurses in Yanbu General Hospital.

Items	*n= 157*	*%*
Gender: Female	*138*	*87.9*
Male	*19*	*12.1*
Age: *20-29 y*	*111*	*70.7*
30-43y	*36*	*22.9*
35-40y	*8*	*5.1*
41-50	*2*	*1.3*
Nationality*: Saudi*	*89*	*56.7*
Non-Saudi	*68*	*43.3*
Level of education		
Diploma	*102*	*65.0*
Bachelor	*37*	*23.5*
Master	*16*	*10.2*
Doctorate	*2*	*1.3*

Table (2) Professional data for nurses in Yanbu General Hospital.

Items	*n = 157*	*%*
Professional license		
Yes	*147*	*93.6*
No	*10*	*6.4*
Working hour per shift		
8 hour	*91*	*58.0*
12 hour	*9*	*5.7*
Other specific	*57*	*36.3*
Place of working in hospital		
Emergency unit	*26*	*16.6*
ICU	*27*	*17.2*
Surgical word	*30*	*19.1*
Medical word	*3*	*1.9*
Pediatric word	*14*	*8.9*
Gynecological / obstetric word	*7*	*4.5*
Operative unit	*12*	*7.6*
Quality administration	*25*	*15.9*
Administration word	*7*	*4.5*
Outpatient clinic	*6*	*3.8*

Table (3a) Communication characteristic in evidence based practice

Items	*n = 157*	*%*
Look for information, research, or evidence to support nursing practice		
Often (several times a week)	*45*	*28.7*
Regularly (weekly)	*28*	*17.8*
Occasionally (1-2 times per month)	*59*	*37.6*
Seldom (less than once / month)	*10*	*6.4*
Never	*15*	*9.6*

Table (3b) Communication characteristic in evidence based practice for research resources.

Items	*Print materials*		*Online resources*		*Other information resources*	
	n = 157	*%*	*n = 157*	*%*	*n = 157*	*%*
More than available	*3*	*1.9*	*4*	*2.5*	*4*	*2.5*
Available	*58*	*36.9*	*22*	*14.0*	*24*	*15.3*
Less than available	*50*	*31.8*	*44*	*28.0*	*38*	*24.2*
Totally unavailable	*46*	*29.4*	*87*	*55.5*	*91*	*58.0*
Personal involved in scientific research					***n = 157***	***%***
Yes					31	19.7
No					126	80.3

Table (4a): Barriers of evidence based practice related to nurse's knowledge,

Items	Mean	±SD
The nurse is unaware to the types of research and resource.	2.64	1.32
Not ability to determine the validity of research and critically appraise.	2.83	1.36
The nurse is uncertain whether to change for new ideas and believe the results of the research.	2.91	1.32
The nurse is isolated from knowledgeable colleagues with whom to discuss the research.	2.56	1.27
The nurse does not have access to the research.	2.64	1.28

Table (4b): Barriers of evidence based practice related to nurse's practice.

Items	Mean	±SD
The nurse does not have research skills.	2.32	1.13
The nurse does not have time to read researches.	2.79	1.10
The nurse does not see the value of research for practice and minimal benefit in practice.	2.32	1.14
The nurse does not have computer skills.	2.03	1.16
The research is not relevant to the nurse's practice.	2.32	1.26

Table (4c): Barriers of evidence based practice related to authority.

Items	Mean	±SD
Physicians and / or administrators will not cooperate with implementation EBP.	2.63	1.34
The research is not reported clearly and other staff are not supportive of implementation readably.	2.78	1.17
The nurse does not feel she/he has enough authority to change patient care procedures.	2.99	1.38
The nurse feels results are not generalizable to own setting.	2.89	1.27

Table (4d): Barriers of evidence based practice related to setting.

Items	Mean	±SD
The facilities are inadequate for implementation .	3.26	1.34
There is not a documented need to change practice.	2.85	1.29
There is insufficient time on the job to implement new ideas.	2.99	1.47
There is resistance to make changes in the work setting.	3.04	1.37
Access to research evidence is poor (slow or no computers, or data bases).	2.04	1.36
There is not support or incentives for clinical practice development.	3.01	1.33

Table (4d): Barriers of evidence based practice related tobarriers to research utilization

Items	Mean	±SD
The research has methodological inadequacies.	2.91	1.24
The conclusions drawn from the research are not justified.	2.81	1.17
The research has not been replicated and not clear for implications.	2.77	1.18
Statistical analyses are not understandable.	2.87	1.17
Research reports/articles are not readily available and not published	2.97	1.27
Administration perceived EBP as a low management priority	3.00	1.19
Research reports are published in a foreign language	2.80	1.28

Table (5): Facilitators of evidence based practice.

Items	Mean	±SD
Improving the understandability and availability/accessibility of research reports	3.19	1.22
Enhancing administrative support, co-operation and encouragement with colleagues	3.40	1.25
Increasing time available for research findings.	2.87	1.20
Conducting more clinically focused, relevant research.	3.29	1.14
Improving research knowledge	3.49	1.15
More employees/sufficient staffing	3.59	1.36
Improving financial resources	3.66	1.22
Improving nurses' attitudes toward research by Giving rewards for using research	3.65	1.22
Translation of the articles to suitable language	3.53	1.18

Table (6) Total score for barriers and facilitators of evidence based practice related to nurse's knowledge, practice, authority, setting, and researcher utilization.

Items	*n= 157*	*%*	*Mean ±SD*
Related to knowledge			*13.61± 5.40*
Satisfactory	*49*	*31.2*	
Unsatisfactory	*108*	*68.8*	
Related to practice			*11.77 ± 4.11*
Utilize in practice	*47*	*29.9*	
Unutilized in practice	*110*	*70.1*	
Related to authority			*11.29 ± 4.39*
Support	*44*	*28.0*	
Not support	*113*	*72.0*	
Related to setting			*17.70 ± 6.37*
Suitable	*46*	*29.3*	
Unsuitable	*111*	*70.7*	
Related to research utilization			*20.13 ± 6.87*
Useful	*44*	*28*	
Not useful	*113*	*72*	
Related to facilitators			*30.68* ± 8.52
Adequate	*45*	*28.7*	
Inadequate	*112*	*71.3*	

Table (7): The correlation between gender and nationality for nurses with evidence based barrier related to knowledge and practice.

Items	*Gender*	*Nationality*
Knowledge	r =0.328 0.000 H.S	r =-0.137- 0.086 N.S
Practice	r =0.306 0.000 H.S	r =-0.279 0.000 H.S

Table (8): The Correlation between the evidence based barrier and facilitators.

Items	Knowledge	Practice	Authority	Setting	Research utilization	Facilitators
Knowledge	—					
Practice	r = .601 sig =.000	—				
Authority	r = .350 sig =.000	r = .481 sig =.000	—			
Setting	r = .445 sig =.000	r = .517 sig =.000	r = .765 sig =.000	—		
Research Utilization	r = .474 sig =.000	r = .456 sig =.000	r = .681 sig =.000	r = .806 sig =.000	—	
Facilitators	r = -.097- sig =.225	r = -.169 sig =.035	r = -.164 sig =.040	r =-.115- sig =.152	r = -.053- sig =.509	—

Table (9): The Correlation between the Evidence Based barrier and Nurses Places of Work at Hospital

Items	Knowledge	Practice	Authority	Setting	Research utilization	Facilitators
Place of working	r =.083 sig =.299	r =.214 sig =.007	r =.191 sig =.017	r = .125 sig = .119	r =.116 sig =.150	r =-.042 sig =.599

Table (10): The Correlation between the Evidence Based Barrier related to Knowledge, Practice, and Research Utilization with the Sources of Information.

Items	Knowledge	Practice	Research utilization
Look of research information for evidence based practice	r =-0.026- sig =0.745 N.S	r =-0.060- sig =0.458 N.S	r =0-.139- sig =0.083 N.S
Print material	r =0.058 sig =0.468 N.S	r =-0.106- sig =0.187 N.S	r =0.084 sig =0.298 N.S
Outline resources	r =0.084 sig =0.296 N.S	r =-.013- sig =0.874 N.S	r =0.185 sig=0.020 S
Other information resources	r =-0.101- sig =0.209 N.S	r =-0.150- sig =.016 N.S	r =0.050 sig =0.533 N.S

4.Discussion

Evidence-based practice provides many opportunities for the future of nursing and improvement of patient outcomes, but it also places demands on clinicians, educators, and researchers to make changes in practice, education, and the focus of programs of research. Each of these changes is critical to improvement of patient outcomes through the use of evidence to guide practice ***(Youngblut, 2001).***

The discussion of the finding will cover fifth main category; ***first:*** Socio-demographics and Professional data for subjects, ***second:*** communication characteristic to assess communication between nurses and hospital organization, ***third***: barriers of evidence based nursing; ***fourth***: facilitations of evidence based

nursing, the least ***fifth :***the correlation between them.

First, nurses' socio-demographic data and Professional data for subjects, the study results reveals that the majority of nurses were studied with regarded to their perceptions of research utilization clinical practice were females, less than two third from subjects have diploma related to level of education. and more than two third between 20-29 year as regard to age. Also the most of subjects have the professional license; this is considered a prerequisite to work in health organizations in Saudi Arabia which agree with ***(SCHS,2013)*** report that its importance in the development of professional performance of health practitioners in various health disciplines. The researcher views that meaning they received their basic education after 1995 which is finding show after the wide speared availability of technological information and personal computer.

At the same line ***(Mashiach, 2011)*** reported that The professional variable dealt with nurses' education. who findings was consistent with recent research revealing that nurses with degrees have a greater tendency to read research literature and implement its findings in their practice.

Also the ***(Paramonczyk, 2005)*** reported that individual nurse must accept full professional responsibility for their continuing education and for keeping abreast of research developments in relevant area of clinical work.

The results of the current study revealed that more than half from subjects working at eight hours per shift. Also all subjective represented the all places in hospital ***(NCT, 2013)***Many nurses now work extended shifts, usually ten or twelve hours at a time. This is particularly true in hospitals, but is also found in other areas of healthcare as well. Another aspect of shift work that should be considered is the need for nurses on evening and night shifts.

Second: communication characteristic to assess communication between nurses and hospital organization.

The present study results revealed that the most of communication characteristic in evidence based practice related to look for information, research or evidence to support nursing occasionally, while for research resources the majority for online recourses and other information recourses un-available. This finding was congruent with ***(Bertulis, 2008)***who supported that Characteristics of the communication which reflect the Presentation and accessibility of the research, also have its barriers and facilitators related to evidence based practice: lack of information technology skills and access to researches articles, a lack of native language references, that most research is published in a foreign language

In the same line large number of widespread use of online networks and smart handheld devices and so because of its many benefits such as frequent sources of information and quick access which supported by ***(Doran, 2010)***who reported that use of personal digital assistants or tablet personal computers for accessing information resources resulted in improvement in nurses' research values and awareness, and in the presentation and accessibility of research evidence.

Third: Barriers of evidence based nursing.

The finding of the present study revealed that mean and standard deviation for each items of barriers of evidence based nursing regarding to nurse's knowledge, the range of means was 2.56 to 2.91, included "the nurses unaware to the types of research and resource, inability to determine critically appraise, isolated from knowledge colleagues and not have access to the research "this finding was congruent with***(Paramonczyk, 2005)*** who reported that barriers residing within the nurses' research values, skills, and awareness were ranked as least significant included; there is insufficient time on the job to implement new ideas; the nurse is unaware of the research; the nurse does not have time to read research; the nurse feels results are not generalizable to own setting; physicians will not cooperate with implementation; the nurse does not feel capable of evaluating the quality of the research; the nurse does not feel that she has enough authority change patient care procedures and other staff are supportive of implementation. And ***(Oranta, 2002)*** say that, nurses perceived isolation from knowledgeable colleagues with whom to discuss the research

The finding of the present study revealed that mean and standard deviation for each items of barriers of EBP related to nurse's practices included that lack in research skills, lack in time for read the research, lack in computer skills and minimal benefit EBN in practices, this finding was congruent with ***(Parahoo, 2000)***who support that, Most nurses have a positive attitude about evidence-based practice. However, there are substantial barriers to EBN, at both individual and organizational levels. At the individual level, nurses lack skill in evaluating the quality of research, they are isolated from knowledgeable colleagues with whom to discuss research, and they lack confidence to implement change.

In the same line ***(Bertulis, 2008)***found that perceived lack of time is the main barrier to evidence-based practice for nurses. A lack of information technology skills and access affects nurses' use of research evidence. Nurses tend to base the selection of information sources on convenience and accessibility rather than quality. They also tend to rely on colleagues as information sources and prefer to refer to them than to printed or computerized sources.

The finding of the present study revealed that mean and standard deviation for each items of barriers of EBP related to authority included that physicians and/or administrators not cooperate with implementation EBP, the research is not reported clearly and not enough authority to change patient care procedures, this finding was congruent with ***(Parahoo, 2000)***who support that nurses identified a lack of organizational support for EBN and noted lack of interest, lack of motivation, lack of leadership, and lack of vision, strategy, and direction among managers. However, this organizational support is crucial in situations in which nurses do not believe they have the authority or autonomy to implement changes in patient care. For example, a physician may read about the effectiveness of a new pain medication and can begin prescribing it immediately; nurses who identify a new effective nursing intervention for pain management must often obtain approval from nursing administration before implementing it.

The finding of the present study revealed that mean and standard deviation for each items of barriers of EBP related to setting included "facilities are inadequate for implementation, insufficient time on job to implement new ideas, resistance to make change and access to research evidence is poor" which supported by***(Retsas, 2000)***reported that Organizational characteristics of health care settings are overwhelmingly the most significant barriers to research use among nurses. Nurses have noted that they have insufficient time to go to the library to read or to implement findings from research. Related to this problem is the inadequacy of library holdings in health care institutions, many of which lack nursing research journals.

this finding was incongruent with ***(Abrahamson, 2012)*** who reported that barriers related to social or organizational barriers to guideline use that are likely to be more important. The importance of the social and organizational context was reflected in the responses provided by our sample. The vast majority of nurses' responses concerned workplace conditions such as time, workload, availability of education, communication among clinicians, and administrative support.

The finding of the present study revealed that mean and standard deviation for each items of barriers of EBP related to research utilization included "inadequate research methodology, conclusion drawn from the research are not justified, research has not been replicated and not clear for implications, understandable statistical analysis for research, research reports not readily and not published or with foreign language, administration perceived EBP is low management, this finding of this study incongruent with ***(Morrisey, 2001)*** who reported that, with increasing interest in evidence-based healthcare, nurses are finding the need to improve skills in locating current, valid evidence to support clinical practice. Because of the holistic nature of nursing, gathering evidence requires searching a variety of sources within many different scientific disciplines. The diverse nature of this task requires effective skills for finding information from both print and electronic sources.

Also, ***(Morrisey, 2001)***The health care literature is continually and rapidly expanding; the task of keeping up with relevant health care information is daunting for all health care professionals. Strategies to facilitate access to research evidence include formulating a clear and concise clinical question, identifying the research design that would best answer the question, and identifying the most appropriate place to look for studies that answer the question.

In the same line ***(Yadav, 2012)***Respondents reported that insufficient time to find and read research reports and insufficient resources to change practice were the greatest barriers to the development of evidence-based practice. Practice development coordinators were perceived as the most supportive resource for changing practice. Using the Internet to search for information was the highest-rated skill and using research evidence to change practice was the lowest-rated skill for developing evidence-based practice. Nurses' precursor skills for developing evidence-based practice, such as database searching and information retrieval, may be insufficient in themselves for promoting evidence-based practice if they cannot find evidence relating to their particular field of practice or if they do not have the time, resources and supports to develop their practice in response to evidence.

Fourth: facilitators of evidence based nursing.

The finding of the present study revealed that mean and standard deviation for each items of facilitators of evidence based nursing, included that" improving the understandability of research reports, enhancing administrative support/cooperative and encouragement with colleagues, increasing time available for research finding, conducting more clinically focused research, improving research knowledge, sufficient staffing, improving finical resources improving nurses' attitudes toward research and translation of the articles to suitable language; this finding was congruent with***(Paramonczyk, 2005)*** reported that organizations administrations; professional nursing organizations and individuals nurses should commit to work openly and collaboratively to facilitate the implementation of research findings into clinical nursing practice with the goal of providing optimal individual patient care.

In the same line support by***(Retsas, 2000)***These were accessibility of research findings, anticipated outcomes of using research, organizational support to use research and support from others to use research. The most important factor was perceived

to be organizational support, particularly in relation to providing time to use and conduct research.

The results of the current study revealed that, the more than two third from subjects (nurses) are unsatisfied related to knowledge, unutilized EBP relate to nurse's practice, not supported in authority, not suitable in setting, not useful in research utilization and facilitators are inadequate to implementation of EBP, this result supported with***(Yava, 2009)*** According to the research results, the first three important barriers were inadequate authority, lack of time, and insufficient facilities. Nurses have perceived the organizational management support as the most important easing factor in their applications. Therefore, organizational and management support is one way that could help nurses apply research to their work As well as ***(Strickland, 2009)***stated that improving research knowledge and awareness, the staff nurse becomes more confident in the value of research and may become more interested and motivated. Sufficient time and staff was also suggested as a major facilitator.

Fifth: the correlation between them.

The result for the current study reveals that highly statistical significant correlation between gender and nurse's knowledge, practice while between nationality and practice. The researcher see that the majority from subject are females, they are more practical and knowledgeable than males. Qualified nurses from non Saudi nurse because Saudi nurses have diploma only in education. which suitable with***(Youngblut, 2001)*** who recommended that Evidence-based practice demands changes in education of students, more practice-relevant research, and closer working relationships between clinicians and researchers.

The finding of the current study reveals that highly statistical significant correlation between items of barriers of evidence based practice included "knowledge, practice, authority, setting, and research utilization". This was supported by ***(Schoonover, 2006 & Hassan 2011)***who found the same result`s and stated that, these result reflecting lack of knowledge and skills related to research utilization and evidence based practice. So the health institutions must be integrate research and practical skills in their program ***(Beyea, 2006)*** supported that who stated that nursing research involves systematic inquiry specifically designed to develop, refine, and extend nursing knowledge. As part of a clinical and professional discipline, nurses have a unique body of knowledge that addresses nursing practice, administration, and education.

Also***, (Leufer, 2009)***This article reviews the principles of evidence-based practice (EBP), the essential components of the EBP process, potential barriers to its implementation and the role of education in supporting EBP. The overall aim is to expand the knowledge base and debate surrounding EBP, and to highlight the significant contribution that nurses can make to improving patient outcomes in practice.

The finding of the current study reveals that statistical significant correlation between facilitators of evidence based practice and " practice and authority ". This agree with***(Jolley, 2002)***demonstrated that, despite the increasing emphasis on research and EBP, Knowledge and application of research in health care remains low. In addition, ***(Turner, 2009)***understanding barriers and facilitators to research utilization may facilitate the application of evidence-based practice

The finding of the current study reveals that highly statistical significant correlation between items of barriers of evidence based practice and place working for nurses, this agree with ***(El-shaer, 2012)T***o provide safe and effective patient care, the nurse must help bridge the gap that exists between research findings and application to practice. The first step in this process may involve the application of knowledge from individual research findings to the clinical setting. This process is commonly referred to as research utilization.

The result of the current study reveals that no statistical significant correlation between knowledge, practice and research utilization with resources of information except outline resources***(Dicenso, 2005)***nurses need only to read a newspaper to know that investigators are continually reporting new research findings. In an effort to stay current with scientific developments in their specialty area, many nurses subscribe to journals, have tables of contents sent to them by email, or scan various Web sites and on-line resources. Most nurses are likely to skim or browse these resources quickly, or if they do not have sufficient time to browse, they may feel overwhelmed by the magnitude of the reading pile. Compounding this is the problem that only a few of the studies published in core health care journals are both of high quality and clinically useful.

Conclusion and Recommendation

Generalizing the results of studies that have assess barriers and facilitators for implementing evidence –based practice among nurses in Yanbu General Hospital .the findings of the present study can help nurses to identify barriers and implement strategies to promote EBP as part of quality improvement. Identifying the facilitators for evidence based practice to implementation for improve patient outcomes. The results revealed the correlation between barriers, facilitators and socio-demographic for subjects.

Conclusion that Barriers and facilitators to EBP adoption occur at the individual and institutional levels. Solutions to the barriers need to be directed to the dimension where the barrier occurs, while recognizing that multidimensional approaches are

essential to the success of overcoming these barriers.

The study recommends that, continuous in-service educational program should be hold for all staff nurses to improve practical of evidence based nursing. Enhance the nurses to research and communication with medical staff, authority and college. Enhance the organization to apply evidence based practice. Educate nursing staff with medical journals and online research about evidence based practices.

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