Novelty Journals

ISSN 2394-7330

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

Beliefs and Barriers toward Evidence Based Practice: Nursing Perception

Heba Ahmed Mohammed[1], Nadia Taha Mohamed[2]

[1]Lecturer of Medical Surgical Nursing,
[2]Lecturer of Nursing Administration,
[1, 2] Faculty of Nursing - Cairo University - Egypt

Abstract: **Evidence based practices (EBP) have been established to enhance the delivery of patients care, reduce cost, increase patient and family awareness and satisfaction and also contribute to professional development.**

Aim: The study aimed to assess nurse's beliefs and barriers regarding EBP at a selected hospital in Cairo.

Design: Descriptive research design was utilized in this study.

Research questions: 1- What are the nurses beliefs regarding value, knowledge, resources and difficulty of EBP? 2- What are the nurses' perception regarding utilization of research into practice, professional and institutional barriers to apply EBP?

Sample: A convenient sample of 100 nurses was included over three consecutive months.

Tools: Three tools were used: study participants characteristics tool, Evidence Based Practice Beliefs Scale and Evidence Based Practice Barriers Scale.

Results: Most of the nurses agreed that EBP results in best clinical care for patients but they disagreed about their ability to implement EBP and to measure the outcomes of clinical care. In addition, EBP consumes too much time and difficult to apply. Moreover, they didn't feel enough authority to implement new ideas.

Conclusion: Nurses had positive beliefs toward evidence based practice. However, they were unable to keep up with the current literature and practice evidence based due to different barriers.

Recommendations: Administrators should encourage nurses to apply evidence based practice in the clinical setting.

Keywords: **Nurses' Perception, Beliefs, Barriers & Evidence based practice.**

I. INTRODUCTION

Nurses as health care providers play a critical role in patient care. They provide 24 hour, seven day a week direct care to patients and their care influences patient outcomes [1, 2]. So nurses should provide quality and standard patient's care based on evidence. In health care, evidence is defined as availability of knowledge to decision makers and provides scientific assessment of the performance [3]. Evidence-based practice has become the gold standard of care in the nursing discipline today [4]. World Health Organization and European Commission emphasize that health care services should be based on the best research evidence [5].

Evidence based practice (EBP) defined as analyzing the research findings; examining its clinical relevance and integrating research findings into practice [6]. Other author [7] added evidence based nursing practice (EBNP) is a problem solving approach to the delivery of healthcare, using the best evidence in clinical decision-making about a patient's care. More specifically, it integrates the best evidence from the research studies and patient care outcome data with the clinician's expertise and patient preferences and values. And it is centered on the belief that evidence should be used to define best clinical practices rather than support the existing, and perhaps outdated nursing interventions.

Many researchers reported that EBP is essential to enhance quality health care, improve health outcomes, reduce health care costs, updated current knowledge to identify clinical problems, reduce medication errors and also implement the best patient's care knowledge for proper clinical decision making and patient outcomes [8, 9]. Nurses in healthcare organizations should use EBP and best research findings to assess their skills, implement clinical procedures and perform effective nursing interventions to provide care plan to improve positive outcomes for their patients [3].

A number of studies investigating nurses' perceptions show that nurses generally view EBP positively and consider it important to improve patient care [10]. Nevertheless, it is a fact that the pace of accepting and implementing EBP is rather slow [11]. Moreover, many studies conducted in different countries showed that nurses strongly believed in the value of evidence based practice for patient care, but their confidence was quite low regarding their own knowledge and skills required for EBP [12 , 13].

Implementation of EBP add additional demands on nurses to apply credible evidence to patient care through searching related evidence, using clinical judgments, and considering patient values and system policies and resources [11]. The same author added to effectively apply the EBP process, a nurse should have the ability to identify knowledge gaps, formulate relevant scientific questions, conduct an efficient search of literature review, apply rules of evidence to determine the validity and reliability of the research studies, apply the research findings to the patient's problem, and finally involve the patient in the clinical decision making process. [5] also clarified that EBP includes the following steps: asking clinical questions, searching for and collecting the most relevant best evidence, critically appraising the best evidence, integrating the best evidence with one's clinical expertise, patient values and preferences, and evaluating outcomes of the practice decision making.

Searching, collecting, appraising, applying and evaluating research evidence are essential components of EBP. However, earlier studies reported that nurses seldom apply research findings into their practice, and they tend to use knowledge derived from their experience and social interactions [14]. Other research studies added that nurse practitioners rarely use research and rely on other sources of information such as their own and their colleagues' knowledge, knowledge gained from their nursing education, and guidance from experts [15].

Barriers to successful implementation of evidence based nursing practice arise from multiple factors including varying education levels and clinical experiences of nursing staff and lack of understanding about the importance of EBP to optimal high quality patient care [16]. Other barriers to adopting EBP may include no enough authority to change patient care procedures, insufficient time to implement new ideas, lack of resources, difficulty in understanding statistical analysis; those barriers are not the all barriers that may affect implementation of EBP [11].

Therefore the purpose of this study was to assess beliefs of nurses working in a private hospital in Cairo City toward EBP; barriers preventing them from adopting EBP in their clinical setting. The areas covered by this study included the understanding; beliefs of nurses toward EBP, their training needs, their literature searching skills and barriers in relation to the nurse, institution and other health care team members, The findings of this study will be useful for hospital administrators and nurses managers to develop an appropriate strategy to promote EBP among their nurses and overcoming associated barriers. As evidence based practice is an information-intensive activity process, findings of this study will also be useful for librarians in establishing and developing comprehensive training programs to improve the literature searching skills of the nurses.

Significance of the study:

Nursing is a science which is essential to derive its knowledge from the finding of research studies. Scientific research is the standard by which sciences derive knowledge [17]. Nursing care is an advancing to the point where it is not enough to deliver nursing interventions. Rather, it is essential to ensuring quality care using the best available evidence. Therefore, EBP is emerging as a widely accepted paradigm for clinical nursing practice. Moreover, EBP provide opportunities for nursing intervention to be more individualized, more effective, dynamic and standardized to maximize effects of clinical judgment. From the clinical experience, the researchers pointed out that EBP attempts to cover gaps in patient care for better outcomes and a healthier population by blending clinical experience and evidence. Further, it takes into account patient values and preferences to promote better patient experiences.

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

Increasing demand for patient safety, quality, and cost effective care require a change in heath care and the transformation of best evidence into nursing practice. Nursing education has a vital role in preparing future nurses for utilization critical thinking, appraisal and decision-making skills and also integrating best evidence and practice. It is crucial to educate nurses to acquire EBP knowledge and competencies in order to deliver safe, high quality, patient centered care to improve quality health care and patient outcomes, along with lower health care cost [18].

The present study is significant to the nursing practice because scanty studies were done in the developing countries such as Egypt to investigate the beliefs and barriers toward evidence based nursing practice among nurses. A few studies done in Egypt by [19, 20] reported that nursing educators showed a positive attitude toward EBP. Although they can't be able to efficiently apply evidence based practice into clinical practices .So it is important to identify the beliefs of nurses in the hospital toward EBP and barriers that may hinder them to apply it in the health care setting. Also it is hoped that the findings of this study might help in improving quality of patients care and establish evidence based data that can promote nursing practice and research.

Theoretical Framework:

The theoretical framework chosen to guide this research is Roger's Diffusion of Innovation [21]. An innovation is an idea or practice that is perceived as new by an individual, so while the concept of EBP now is not new, it can still be considered as an innovation. Five stages are involved in the Roger's model as knowledge, persuasion, decision, implementation, and confirmation [21]. These stages are important in the implementation strategies for EBP. The first step is knowledge, an awareness of the innovation and adequate knowledge of how to implement. The second step is persuasion; the individual interacts mentally with knowledge gained and forms an attitude that is either for or against adopting the innovation. After an attitude is formed, the individual begins to act in ways that lead up to a decision. The formal decision is made just before implementation; typically an individual will try out an idea before fully implementing it. In the final stage, a person will seek confirmation of his decision through action [22].

This model demonstrates that adoption of an innovation is a process with several steps. Before application of EBP, a formal decision must be made to implement EBP; awareness, knowledge, attitudes and beliefs and barriers must precede the implementation of EBP [23]. In relation to Roger's model, the researchers hope to gain an understanding of nurses beliefs regarding EBP; explore specific barriers to EBP implementation and also elicit recommendations to enhance promotion of EBP in the clinical setting.

II. MATERIAL AND METHODS

Design: A descriptive research design was utilized in this study.

Aim of the study: this study aimed to assess staff nurse's beliefs and barriers regarding Evidence Based Practice at a private hospital in Cairo, Egypt.

Research Questions: The current study had main questions:

1. What are the nurses beliefs regarding value of Evidence Based Practice?
2. What are the nurses beliefs regarding knowledge of Evidence Based Practice?
3. What are the nurses beliefs regarding resources of Evidence Based Practice?
4. What are the nurses beliefs regarding difficulty to apply Evidence Based Practice?
5. What are the nurses perception regarding utilization of research into clinical Practice
6. What are the nurses perception regarding professional barriers to apply EBP?
7. What are the nurses perception regarding organizational barriers to apply EBP?

Operational definition:

Beliefs: conviction of nurses or point of nurse's view toward evidence based practice in relation to value, knowledge, resource and difficulties of evidence based practice application. It was measured by [24]

Barriers: obstacles for implementing evidence based practice as mentioned by nurses. These obstacles may include utilization of research into clinical practice, nurse's experiences and clinical setting. It was measured by [25]

Evidence based practice: ability of nurses to critically examined literature and use research findings for safe, efficient and best nursing care

Subjects:

A convenient sample of 100 adult male & female staff nurses was included over three consecutive months. They were working in different units at the private hospital in Cairo, Egypt. They matched to the inclusion criteria which include nurses who were applied direct nursing care, with at least one year of experience, and have bachelor degree or higher in nursing.

Setting:

The study conducted at private Hospital in Cairo, Egypt. Its capacity is 100 beds with total nurses number 120 included different categories of staff nurses (Bachelor of Nursing, Diploma and Master of Nursing).This hospital consist of 8 floors.

Tools:

To achieve the aim of the present study, data were collected using the following tools:

1- Study participant's characteristics tool which designed to collect demographic data such as age, gender, working department, and years of experience, qualifications of nurses and level of knowledge regarding evidence based practice.

2- Evidence Based Practice Beliefs Scale: it was adopted from [24]. It contains 16 items to measure nurses' beliefs toward evidence based practice.

3- Evidence Based Practice Barriers Scale; it was adopted from [25]. It contains 29 items to measure barriers of evidence based practice implementation in clinical settings.

The scoring system: Five point Likert- scale was used for both scales, the number of responses on item indicates the degree to which the respondents agree or disagree, it ranges from 1 (strongly disagree) to 5 (strongly agree). This questionnaire was estimated by the total number of responses by the participants, the higher the score, the higher agreement.

Tool validity:

Evidence based practice belief and barrier questionnaires submitted to six experts in nursing from different specialties in Faculty of Nursing, Cairo-University for testing the content, coverage, clarity, wording, length, format and overall appearance.

Pilot study:

A pilot study was carried out on 10 staff nurses (excluded from the main study's sample) from the previously mentioned setting to assess and ensure the applicability and suitability of the statements and time required to complete the questionnaire, therefore the rewording or rephrasing of statements was done in 2 items.

Reliability:

The Cronbach's alpha coefficient was used to measure internal consistency reliability of evidence based practice beliefs questionnaire (0.84 to 0.96) which was excellent. While the Cronbach's alpha coefficient was used to measure internal consistency reliability of evidence based practice barriers questionnaire (0.65 to 0.80) which was good.

Procedures:

An official permission to carry out the study was granted from the head manager of the hospital to proceed with the study. Nurses were informed that participation in the study was completely voluntarily and they had the right to withdraw at any time. The nurses were assured that data are confidential and used only for research purposes. During data collection the

researchers handed the demographic sheet and two questionnaire sheets individually to the participant nurses in their units and asked them to fill them and return back. If the nurses return back the questionnaire that is means their acceptance. The time spent to fill the questionnaire ranged from 10 to 15 minutes. The researchers were ready to answer any question during filling the questionnaire. Data was collected in a period of three months from March to May 2018.

Statistical Analysis:

Obtained data will be tabulated, computed and analyzed using (SPSS) program version 23. Descriptive statistics such as frequency, percentage, mean & standard deviation; spearman correlation coefficient to examine the relationship between variables and chi square test to test qualitative data will be utilized to analyze data pertinent to the study. Level of significance will be adopted at $P \leq 0.05$.

Ethical considerations:

The data was collected after obtaining the approval from the hospital responsible authorities. Prior to the data collection, informed consents of all nurses were obtained. The nurses were informed about the purpose of the research study.

III. RESULTS

A total of 120 copies of the questionnaire were distributed among staff nurses, out of which 105 nurses returned the questionnaire. The researchers used only 100 questionnaire of them and the other 5 copies were discarded because they had incomplete data and not valid for analysis. Statistical findings of the current study are presented in three main sections. **Section** 1: Descriptive statistical findings related to demographic characteristics of the study participants and knowledge regarding EBP (Table 1**,** Figure 1-3). **Section 2**: Descriptive statistical findings related to delineating research questions of the study based on Roger's model to assess beliefs of nurses and barriers that may hinder EBP implementation (Tables 2, 5). **Section 3**: Descriptive statistical findings clarifying other additional findings as relationship between selected demographic characteristics, beliefs, and barriers regarding utilization of EBP into clinical practice as reported by nurses (Tables3,4, 6)

Table (1): Demographic characteristics of the study participant (n= 100)

Variables	Category	Study participant	
		N	%
Gender	- Male	16	16
	- Female	84	84
Age	- < 30 years	67	67
	- 30-40 years	26	26
	- > 40 years	7	7
Mean ± SD	28.27 ± 5.278		
Years of clinical experience in the hospital	- <6 years	59	59
	- 6-10 years	29	29
	- > 10 years	12	12
Mean ± SD	6.20 ± 5.031		
Knowledge regarding Evidence based practice	- No knowledge	36	36
	- Beginning level	60	60
	- Intermediate level	4	4
	- Advanced level	0	0

Table (1) In relation to gender, (84 %) of the study participants were female, (67 %) of the study participants their ages less than 30 years with mean age (28.27 ± 5.278). In relation to years of clinical experience in the hospital about (59 %) of the study participants were had less than 6 years clinical experience in the hospital with mean clinical experience (6.20 ± 5.031). Moreover, (60%) of the nurses were had the beginning level of knowledge regarding Evidence based practice.

Novelty Journals

ISSN 2394-7330

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

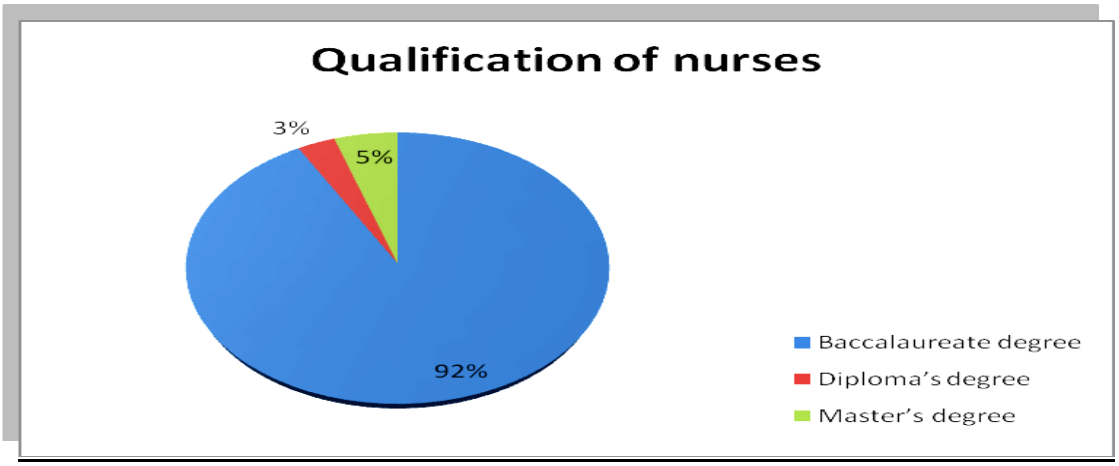

Figure (1): Percentage distribution of nurses qualification (level of education) (n= 100).

Figure (1): showed that 92% of the study participants had baccalaureate degree.

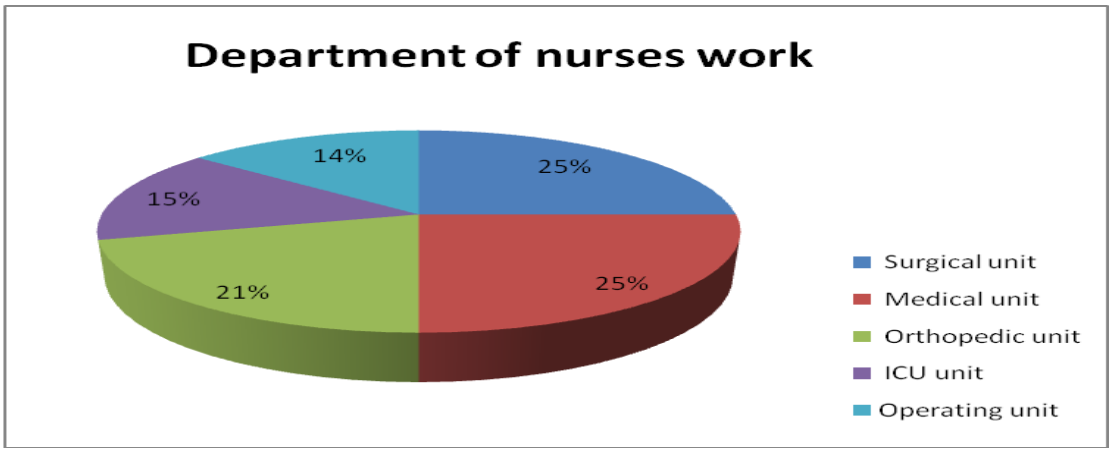

Figure (2): Percentage distribution of nurse's work unit in the hospital (n= 100).

Figure (2): clarified that 25% of nurses were working in surgical and medical units.

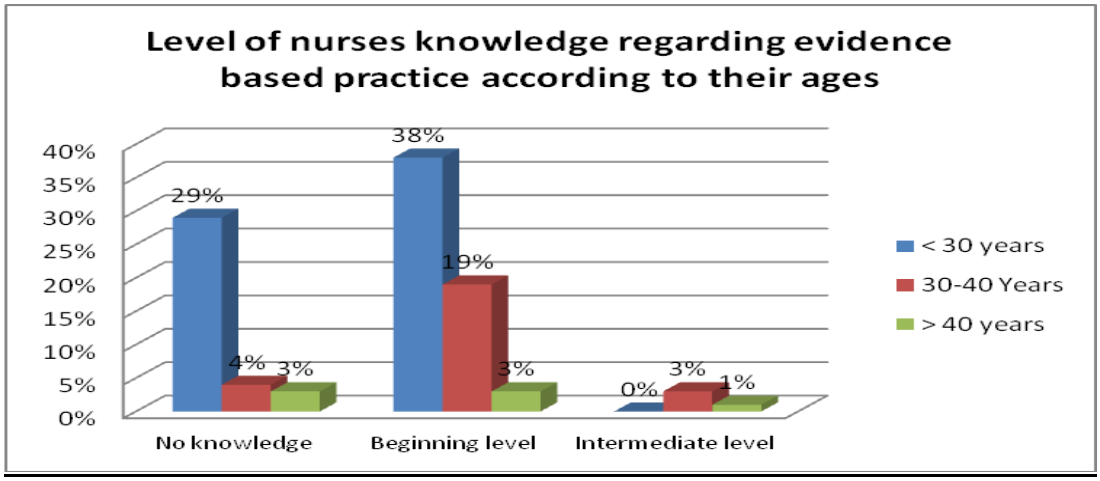

Figure (3): Comparison of Nurses Knowledge level regarding EBP according to their ages (n= 100).

Figure (3): illustrated that (38%, 19% and 3% respectively) of nurses who were ages less than 30 years, between 30 to 40 years and more than 40 years had beginning level of knowledge regarding evidence based practice. There was significant statistical differences between level of nurses knowledge according to their ages ($\chi 2$ =13.578 at P = .009).

Novelty Journals

ISSN 2394-7330

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

Table (2): Mean and frequency distribution regarding beliefs of the staff nurses related to EBP (n= 100).

Variable	Mean(SD)	Strongly Disagree N (%)	Disagree N (%)	Neither Agree nor Disagree N (%)	Agree N (%)	Strongly agree N (%)
- **Beliefs related to the value of EBP:**						
1. EBP results in the best clinical care for patients.	4.12 (0.477)	0 (0)	0 (0)	6(6)	76(76)	18(18)
2. Critically appraising evidence is an important step in the EBP process.	4.02 (0.550)	0 (0)	0 (0)	14(14)	70(70)	16(16)
3. Evidence-based guidelines can improve clinical care	4.06(0.528)	0 (0)	0 (0)	11(11)	72(72)	17(17)
4. Implementing EBP will improve the delivered care.	4.06 (0.547)	0 (0)	0 (0)	12(12)	70(70)	18(18)
5. Care delivered is evidence -based.	2.50 (0.785)	0 (0)	67(67)	17(17)	15(15)	1(1)
- **Beliefs related to knowledge of EBP:**						
1. Measure the outcomes of clinical care.	2.48 (0.689)	1(1)	60(60)	29(29)	10(10)	0 (0)
2. Implement EBP sufficiently enough to make practice changes.	2.47 (0.717)	1(1)	63(63)	24(24)	12(12)	0 (0)
3. Have ability to implement EBP where I work.	2.46 (0.717)	1(1)	64(64)	23(23)	12(12)	0 (0)
4. Steps of EBP are clear	2.34(0.685)	1(1)	75(75)	13(13)	11(11)	0 (0)
5. Surly I can implement EBP	2.37 (0.706)	1(1)	73(73)	14(14)	12(12)	0 (0)
- **Beliefs related to resources of EBP:**						
1. Search for the best evidence in a time efficient way.	3.89 (0.618)	0 (0)	1(1)	22(22)	64(64)	13(13)
2. Access the best resources to implement EBP.	2.76 (0.793)	0 (0)	45(45)	35(35)	19(19)	1(1)
3. Overcome barriers in implementing EBP.	2.54 (0.731)	1(1)	57(57)	29(29)	13(13)	0 (0)
4. Implement EBP in a time efficient way	2.51 (0.718)	1(1)	59(59)	28(28)	12(12)	0 (0)
- **Beliefs related to difficulty and time regarding EBP:**						
1. EBP consumes too much time.	4.09 (0.570)	0(0)	0(0)	12(12)	67(67)	21(21)
2. EBP is difficult.	4.07 (0.607)	0(0)	1(1)	12(12)	66(66)	21(21)

Table (2): According to nurses beliefs related to **the value** of EBP, the table illustrated that (76%) of nurses agreed regarding EBP results in the best clinical care for patients,(72%) of them agreed that evidence-based guidelines can improve clinical care. While (67.0%) of nurses were disagree regarding the care that they deliver is EBP.

As regards to nurses beliefs related to **the knowledge** of EBP, the table revealed that (75%) of nurses disagreed about the clarity steps of EBP. In addition (73%) of nurses disagreed about their ability to implement EBP. While (60%) of nurses were disagree regarding their ability to measure the outcomes of clinical care.

According to beliefs related to **resources** of EBP, table illustrated that (64%) of nurses agreed that they can search for the best evidence to answer clinical questions in a time efficient way. While (45%) of nurses disagreed that they can access the best resources in order to implement EBP. In relation to beliefs related to **difficulty and time** of EBP, the same table clarified that (67%) of nurses agreed that EBP takes too much time, (66.0%) of them agreed that EBP is difficult to apply.

Novelty Journals

ISSN 2394-7330

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

Table (3): Percentage and chi- square regarding beliefs of the staff nurses toward the value, knowledge, resources and difficulty of EBP according to their ages (n= 100).

Variables	Age of the nurse									
	Less than 30 years			30 - 40 years			More than 40 years			
	SD &D N (%)	NA nor DA N (%)	SA &A N (%)	SD &D N (%)	NA nor DA N (%)	SA &A N (%)	SD &D N (%)	NA nor DA N (%)	SA &A N (%)	χ^2 (P-Value)
- **Beliefs related to the value of EBP:**										
1. EBP results in the best clinical care for patients.	0(0)	5(5)	62(62)	0(0)	0(0)	26(26)	0(0)	1(1)	6(6)	10.185 0.037*
2. Critically appraising evidence is an important step in the EBP process.	0(0)	10(10)	57(57)	0(0)	2(2)	24(24)	0(0)	2(2)	5(5)	6.783 0.148
3. Evidence-based guidelines can improve clinical care	0(0)	9(9)	58(58)	0(0)	0(0)	26(26)	0(0)	2(2)	5(5)	11.340 0.023*
4. Implementing EBP will improve the delivered care.	0(0)	9(9)	58(58)	0(0)	2(2)	24(24)	0(0)	1(1)	6(6)	0.994 0.911
5. Delivered care is evidence based.	47(47)	11(11)	9(9)	16(16)	4(4)	6(6)	4(4)	2(2)	1(1)	4.190 0.651
- **Beliefs related to knowledge of EBP:**										
1. Measure the outcomes of clinical care.	46(46)	15(15)	6(6)	11(11)	11(11)	4(4)	4(4)	3(3)	0(0)	7.020 0.319
2.Implement EBP sufficiently enough to make practice changes.	49(49)	10(10)	8(8)	13(13)	9(9)	4(4)	2(2)	5(5)	0(0)	14.470 0.025*
3. Have ability to implement EBP where I work.	48(48)	12(12)	7(7)	13(13)	8(8)	5(5)	4(4)	3(3)	0(0)	6.480 0.372
4. Steps of EBP are clear	55(55)	6(6)	6(6)	17(17)	5(5)	4(4)	4(4)	2(2)	1(1)	5.094 0.532
5. SurlyI can implement EBP	54(54)	7(7)	6(6)	16(16)	5(5)	5(5)	4(4)	2(2)	1(1)	5.398 0.494
- **Beliefs related to resources of EBP:**										
1. Search for the best evidence in a time efficient way.	1(1)	13(13)	53(53)	0(0)	6(6)	20(20)	0(0)	3(3)	4(4)	4.094 0.664
2. Access the best resources to implement EBP.	36(36)	20(20)	11(11)	7(7)	11(11)	8(8)	2(2)	5(5)	0(0)	9.350 0.155
3. Overcome barriers in implementing EBP.	45(45)	14(14)	8(8)	10(10)	11(11)	5(5)	3(3)	4(4)	0(0)	9.951 0.127
4. Implement EBP in a time efficient way	46(46)	13(13)	8(8)	11(11)	11(11)	4(4)	3(3)	4(4)	0(0)	9.668 0.139
- **Beliefs related to difficulty and time of EBP:**										
1. EBP consumes too much time.	9(9)	45(45)	13(13)	2(2)	18(18)	6(6)	1(1)	4(4)	2(2)	.994 .911
2. EBP is difficulty	10(10)	43(43)	14(14)	2(2)	19(19)	5(5)	1(1)	4(4)	2(2)	5.339 0.501

*Significant at the ≤ 0.05 probability level.

N.B: **SD &D** means strongly disagree and disagree. **NA nor DA** means neither agree nor disagree .**SA &A** means strongly agree and agree.

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

Table (3): According to beliefs related to the **value** of EBP, the table illustrated that (62%) of nurses who ages less than 30 years agreed regarding EBP results in the best clinical care for patients, (58%) of them agreed that evidence-based guidelines can improve clinical care and also implementing EBP will improve the care that they deliver to their patients. While (47%) of nurses less than 30 years disagreed regarding the care that they deliver is evidence -based. There was significant statistical differences in relation to their beliefs about EBP results in the best clinical care for patients($\chi 2$ =10.185 at P = 0.037) and also there was significant statistical differences in relation to their beliefs about evidence-based guidelines can improve clinical care according to their ages ($\chi 2$ =11.340 at P = 0.023).

As regards to beliefs related to the **knowledge** of Evidence based practice, table (3) revealed that (55%) of nurses less than 30 years were disagree about the steps of EBP are clear, (54.0%) of them were disagree about their ability to implement EBP. While (46%) of nurses less than 30 years were disagree regarding their ability to measure the outcomes of clinical care. There was significant statistical differences in relation to their beliefs about implementation of EBP sufficiently enough to make practice changes according to their ages ($\chi 2$ =14.470 at P = 0.025).

According to beliefs related **resources** regarding Evidence based practice, table (3) illustrated that (53%) of nurses less than 30 years agreed they can search for the best evidence to answer clinical questions in a time efficient way. While (36%) of them were disagree they can access the best resources in order to implement EBP. There were no significant statistical differences in all items related to beliefs of resources regarding EBP among nurses according to their ages. In relation to beliefs related **difficulty and time of EBP**, table (3) clarified that (45%) of nurses less than 30 years were neither agree nor disagree that EBP takes too much time, (43%) of them were neither agree nor disagree that EBP is difficult to apply. There were no significant statistical differences in all items related among nurses according to their ages.

Table (4): Spearman correlation between beliefs of the staff nurses regarding EBP and clinical experience years

Beliefs of the staff nurses	Clinical experience years
Beliefs related to the value of EBP:	
1. EBP results in the best clinical care for patients.	Correlation: 0.221 P-value: 0.027*
2. Critically appraising evidence is an important step in the EBP process.	Correlation: 0.131 P-value: 0.194
3. Evidence-based guidelines can improve clinical care	Correlation: 0.207 P-value: 0.039*
4. Implementing EBP will improve the delivered care.	Correlation: - 0.025 P-value: 0.808
5. Delivered care is evidence -based.	Correlation: 0.135 P-value: 0.182
Beliefs related to knowledge of EBP:	
1. Measure the outcomes of clinical care.	Correlation: 0.085 P-value: 0.399
2. Implement EBP sufficiently enough to make practice changes.	Correlation: 0.020 P-value: 0.844
3. Have ability to implement EBP where I work.	Correlation: 0.227 P-value: 0.023*
4. Steps of EBP are clear	Correlation: 0.245 P-value: 0.014*
5. Surly I can implement EBP	Correlation: 0.258 P-value: 0.009*
- Beliefs related to resources of EBP:	
1. Search for the best evidence in a time efficient way.	Correlation: 0.269

	P-value: 0.007*
2. Access the best resources to implement EBP.	Correlation: 0.271 P-value: 0.006*
3. Overcome barriers in implementing EBP.	Correlation: 0.233 P-value: 0.020*
4. Implement EBP in a time efficient way	Correlation: 0.168 P-value: 0.094
- Beliefs related to difficulty and time of EBP:	
1. EBP consumes too much time.	Correlation: 0.297 P-value: 0.003*
2. I believe EBP is difficulty	Correlation: 0.300 P-value: 0.002*

***Correlation is significant at the 0.05 level (2 – tailed)**

Table (4) presented that, there were positive weak correlation between nurses beliefs regarding EBP and their clinical experience in the following items, EBP results in the best clinical care for patients, evidence-based guidelines can improve clinical care, and also their ability to implement EBP where they work. In addition, they were clear about the steps of EBP, they can implement EBP and search for the best evidence to answer clinical questions in a time efficient way. Moreover, they can access the best resources in order to implement EBP, they can overcome barriers in implementing EBP. Finally, EBP takes too much time and is difficult. All of these items were positively correlate with the nurse's beliefs regarding EBP and their clinical experience years.

Table (5): Mean and frequency distribution regarding Barriers as mentioned by the staff nurses related to application of EBP (N= 100).

Variables	Mean (SD)	Strongly disagree No (%)	Disagree No (%)	Neither agree nor disagree No (%)	Agree No (%)	Strongly agree No (%)
- Barriers related to utilization of Research in clinical Practice						
1-Research reports/articles are not readily available	3.94(0.583)	0(0)	2(2)	14(14)	72(72)	12(12)
2-Implications for practice are not made clear	3.99(0.522)	0(0)	0(0)	14(14)	73(73)	13(13)
3-Statistical analyses are not understandable	3.97(0.460)	0(0)	0(0)	12(12)	79(79)	9(9)
4-The research is not relevant to the nurse's practice	3.94(0.565)	0(0)	2(2)	13(13)	74(74)	11(11)
5- Research articles are not published fast enough	3.98(0.449)	0(0)	0(0)	11(11)	80(80)	9(9)
6- The conclusions from the research are not justified	4.03(0.502)	0(0)	0(0)	11(11)	75(75)	14(14)
7- The literature reports conflicting results	4.00 (0.512)	0(0)	0(0)	13(13)	74(74)	13(13)
8-The research has not been replicated	4.02 (0.531)	0(0)	0(0)	13(13)	72(72)	15(15)
9- The research is not reported clearly and readably	3.95 (0.435)	0(0)	0(0)	12(12)	81(81)	7(7)
10- The amount of research information is overwhelming	4.04(0.448)	0(0)	0(0)	8(8)	80(80)	12(12)
11-The research has methodological inadequacies	3.96(0.470)	0(0)	0(0)	13(13)	78(78)	9(9)
12-The relevant literature is not compiled in one place	4.00 (0.449)	0(0)	0(0)	10(10)	80(80)	10(10)
- Professional barriers related to the nurse						
1- Isolation from knowledgeable colleagues with whom to discuss the research	3.94(0.679)	0(0)	5(5)	11(11)	69(69)	15(15)
2- Sees little benefit for self	3.85(0.657)	0(0)	6(6)	12(12)	73(73)	9(9)
3- Unaware of the research	3.93(0.555)	0(0)	2(2)	13(13)	75(75)	10(10)

4- Does not have time to read research	3.89(0.695)	0(0)	6(6)	12(12)	69(69)	13(13)
5- Does not see the value of research for practice	3.89 (0.764)	0(0)	8(8)	11(11)	65(65)	16(16)
6- Feels the benefits of changing practice will be minimal	4.02(0.635)	0(0)	2(2)	13(13)	66(66)	19(19)
7- Uncertain whether to believe the results of the research	4.01(0.659)	0(0)	4(4)	9(9)	69(69)	18(18)
8- Does not feel enough authority to change patient care procedures	4.07(0.573)	0(0)	2(2)	7(7)	73(73)	18(18)
9- Feels results are not generalizable to own setting	4.09 (0.570)	0(0)	1(1)	9(9)	70(70)	20(20)
10- Does not feel capable of evaluating the quality of the research	3.95 (0.609)	0(0)	2(2)	15(15)	69(69)	14(14)
11- Unwilling to change/try new ideas	3.97(0.784)	1(1)	6(6)	8(8)	65(65)	20(20)
- **Institutional barriers**						
1- The facilities are inadequate for implementation	4.12(0.608)	0(0)	1(1)	10(10)	65(65)	24(24)
2-Physicians will not cooperate with implementation	4.19(0.615)	0(0)	1(1)	8(8)	62(62)	29(29)
3-Administration will not allow implementation	4.22(0.579)	0(0)	0(0)	8(8)	62(62)	30(30)
4-There is not a documented need to change practice	4.23(0.529)	0(0)	0(0)	5(5)	67(67)	28(28)
5-Other staff are not supportive of implementation	4.22 (0.504)	0(0)	0(0)	4(4)	70(70)	26(26)
6- Insufficient time on the job to implement new ideas	4.23 (0.510)	0(0)	0(0)	4(4)	69(69)	27(27)

(SD): Standard Deviation

Table (5): According to **barriers related to utilization of Research into clinical Practice**, the table illustrated that (81%) of nurses agreed that the research is not reported clearly and readably, (80%) of them agreed that the amount of research information is overwhelming and the relevant literature is not compiled in one place, and also research reports/articles are not published fast enough. While (72 %) of nurses agreed that research reports/articles are not readily available, and has not been replicated.

In relation to **professional barriers**, the table showed that (75%) of nurses agreed that they are unaware of the research, (73%) of nurses agreed that they sees little benefit for self and they didn't feel enough authority to change patient care procedures. While (65%) of nurses agreed that they didn't see the value of research for practice and they were unwilling to change/try new ideas. As regards to **Institutional barriers**, the table clarified that (70%) of nurses agreed that other staff are not supportive of implementation, (69%) of nurses agreed that there is insufficient time on the job to implement new ideas. While (62%) of nurses agreed that physicians will not cooperate with implementation of EBP and administrators will not allow implementation.

Table (6): Percentage distribution and chi- square regarding barriers related to application of EBP and years of clinical experience in the hospital (n= 100).

Variables	Years of clinical experience in the hospital						
	Less than 6 years			More than or equal 6 years			
	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	χ^2 (P- Value)
- **Barriers related to utilization of Research in clinical Practice**							
1-Research articles are not readily available	1(1)	7(7)	51(51)	1(1)	7(7)	33	4.824 (0.567)
2-Implications for practice are not made clear	0(0)	7(7)	52	0(0)	7(7)	34	10.115 (0.039)*

3-Statistical analyses are not understandable	0(0)	5(5)	54	0(0)	7(7)	34	12.652 (0.013)*
4-The research is not relevant to the nurse's practice	0(0)	8	51(51)	2	5(5)	34	7.734 (0.258)
5- Research articles are not published fast enough	0(0)	6(6)	53(53)	0(0)	5(5)	36	3.009 (0.556)
6- The conclusions drawn from the research are not justified	0(0)	5(5)	53(53)	0(0)	5(5)	36	4.587 (0.332)
7- The literature reports conflicting results	0(0)	6(6)	53(53)	0(0)	7(7)	34	11.914 (0.018)*
8-The research has not been replicated	0(0)	6(6)	53(53)	0(0)	7(7)	34	12.949 (0.012)*
9- The research is not reported clearly and readably	0(0)	6(6)	53(53)	0(0)	6	35	6.999 (0.136)
10- The amount of research information is overwhelming	0(0)	6(6)	53(53)	0(0)	2	39	4.592 (0.332)
11-The research has methodological inadequacies	0(0)	8	51(51)	0(0)	5(5)	36	2.539 (0.638)
12-The relevant literature is not compiled in one place	0(0)	7(7)	52	0(0)	3	38	3.064 (0.547)
- **Professional barriers related to nurses**							
1- Isolation from knowledgeable colleagues with whom to discuss the research	3(3)	7(7)	49(49)	2(2)	4(4)	35(35)	8.381 0.212
2- Sees little benefit for self	3(3)	8(8)	48(48)	3(3)	4(4)	34(34)	6.748 0.345
3- Unaware of the research	1(1)	8(8)	50(50)	1(1)	5(5)	35(35)	4.239 0.644
4- Doesn't have time to read research	2(2)	7(7)	50(50)	4(4)	5(5)	32(32)	5.025 0.541
5-Does not see the value of research for practice	4(4)	6(6)	49(49)	4(4)	5(5)	32(32)	2.219 0.899
6-Feels the benefits of changing practice will be minimal	1(1)	7(7)	51(51)	1(1)	6(6)	34(34)	6.927 0.328
7-Uncertain whether to believe the results of the research	2(2)	6(6)	51(51)	2(2)	3(3)	36(36)	5.170 0.522
8-Does not feel enough authority to change patient care procedures	1(1)	4(4)	54(54)	1(1)	3(3)	37(37)	6.563 0.363
9-Feels results are not generalizable to own setting	1(1)	5(5)	53(53)	0(0)	4(4)	37(37)	5.574 0.473
10- Does not feel capable of evaluating the quality of the research	2(2)	10(10)	47(47)	0(0)	5(5)	36(36)	4.596 0.597
11- Unwilling to change/try new ideas	5(5)	4(4)	50(50)	2(2)	4(4)	35(35)	5.905 0.658
- **Institutional barriers**							
1- The facilities are inadequate for implementation	0(0)	4(4)	55(55)	1(1)	6(6)	34(34)	6.166 0.405
2-Physicians will not cooperate with implementation	0(0)	3(3)	56(56)	1(1)	5(5)	35(35)	9.572 0.144
3-Administration will not allow implementation	0(0)	3(3)	56(56)	0(0)	5(5)	36(36)	7.724 0.102
4-There is not a documented need to change practice	0(0)	2(2)	57(57)	0(0)	3(3)	38(38)	2.257 0.689
5-Other staff are not supportive of implementation	0(0)	2(2)	57(57)	0(0)	2(2)	39(39)	3.038 0.552
6-Iinsufficient time on the job to implement new ideas	0(0)	2(2)	57(57)	0(0)	2(2)	39(39)	1.406 0.843

Significant at the ≤ 0.05 probability level

Table (6): According to **barriers related to utilization of Research into clinical Practice**, the table (6) illustrated that (54%) of nurses less than 6 years experience in the hospital agreed that statistical analyses are not understandable. Moreover, (53.0%) of the same group agreed that research articles are not published fast enough, conclusions drawn from

the research are not justified, literature reports conflicting results, research has not been replicated, research is not reported clearly and readably and research information is overwhelming. There were significant statistical differences in selected items as research implications for practice are not made clear, statistical analyses are not understandable, literature reports conflicting results and research has not been replicated according to the perception of nurses related to the barriers of EBP application with reference to their clinical experience in the hospital.

According to **professional barriers**, the table (6) illustrated that (54%) nurses less than 6 years experience agreed that they didn't feel enough authority to change patient care procedures, (53%) of them agreed that they feels results are not generalizable to clinical setting. There were no significant statistical differences in all items related to Professional barriers among nurses according to their clinical experience years in the hospital. As regards to **Institutional barriers**, the table (6) showed that (56%) of nurses less than 6 years experience in the hospital agreed that physicians will not cooperate with implementation of EBP and administration will not allow implementation, (57%) of the same group agreed that there is not a documented need to change practice, other staff are not supportive of implementation and there is insufficient time on the job to implement new ideas. There were no significant statistical differences in all items related to institutional barriers among nurses according to their clinical experience years in the hospital.

IV. DISCUSSION

Improving clinical practice outcomes will be achieved if health care providers use the best research evidence in nursing intervention. Implementation of EBP in health care organizations is known as a challenge of the nursing practice. Evidence-based practice has emerged as a marker for quality of patient's care. Based on Roger's model, the discussion is concerned about answering the research questions of the current study which related to assessment of the nurse's beliefs and exploration of specific barriers to EBP implementation. The discussion presented in three main sections.

Section I: is concerned about personal characteristics of the nurses who participated in the study. **Section II**: is related to beliefs of the participants related to the value, knowledge, resources and difficulty of Evidence based practice. **Section III:** is focused on barriers as mentioned by participants related to utilization of research findings into clinical practice, professional and institutional barriers.

The first section revealed that more than two thirds of the study participants were female; could be attributed to the fact that males were recently introduced to the nursing institutions and faculties in Egypt. The age of more than half of the study participants were less than thirty years with mean age (28.27 ± 5.278). In relation to years of clinical experience in the hospital, it was observed that more than half of the study participants had less than six years clinical experience with mean (6.20 ± 5.031), this is matched with the majority of their ages in the hospital. With reference to qualification, the majority of the study participants had bachelor degree. In addition, half of the nurses were working in medical and surgical units. Moreover, more than half of them had the beginning level of knowledge regarding EBP.

These findings were congruent with [26] according to their study on 263 nurses in Iran at Zahedan Teaching Hospitals, they reported that more than two thirds of the study sample were females with average age 28.4 years (SD = 5.4), most of the participants were employed with education level of bachelor's degree and about two thirds of them had job experience less than 5 years. Other study was conducted by [4] on 188 nursing students of a Saudi University go along with the current study in relation to the mean age of their study participants, it was (28.93).While more than half of the respondents were males which in contrast with our study findings. At the same year, another study congruent with our study finding on 70 professional nurses in a private intensive care unit in the Nelson Mandela, reported that the respondents were mostly female with less than 10 years of work experience [27]. Another study done by [28] on 120 nurses, reported that two thirds of nurses had more than five years experience and more than half of them had a bachelor degree in nursing science.

The current study illustrated that more than half of the nurses had beginning level of knowledge regarding EBP. The level of knowledge is increased in nurses less than thirty years more than older nurses. There was significant statistical differences between levels of nurse's knowledge and age. The researchers clarified that nurses whose ages less than thirty years recently taught research process and EBP in their faculties through undergraduate curricula or post graduate studies, and also most of younger nurses had computer skills and use technology which enhance searching strategies much better than older nurses. In this respect, [27] and [14] reported that nurses younger than forty years of age had a better understanding of evidence based practice and level of their knowledge regarding research process and EBP is higher than older nurses, so they able to implement EBP much more better.

The Second Section: focused on the beliefs of the staff nurses related to the value, knowledge, resources and difficulty of EBP. The current study showed that more than two thirds of the nurses agreed that EBP results in the best clinical care for patients and evidence-based guidelines can improve outcome of clinical practice. The findings of our study revealed that higher percentage of nurses had positive responses regarding value of EBP that were matched with other studies [5, 4, 29] in relation to EBP is significant not only for improved implementation of its steps, but also for valuing nurse competencies to improve quality of patient's care [30].

As regards to nurses beliefs related to the **knowledge** of EBP, the current study indicated that about three quarters of nurses disagreed about the clarity steps of EBP and their ability to implement EBP and implementation of EBP sufficiently enough to make practice changes. Moreover, more than half of them disagreed regarding their ability to measure the outcomes of clinical care. The researches pointed out that the baccalaureate nurses were studied the theoretical part of EBP through their nursing curriculum, so they aware about quality of patient care is better when evidence is used but the implementation of evidence practice to change or to improve clinical practice is difficult for them because they are overloaded and had many responsibilities regarding their work in the hospital, so they had no time to search or to read any research or literature review related to improving clinical practice outcome based on EBP. In the same stream [31] & [32] reported that their participants were less certain that they could implement EBP in their workplaces might be due to lack of knowledge, resources, time, and scientific authority to change practices.

According to beliefs related to **resources** regarding EBP, the current study illustrated that around two thirds agreed that they can search for the best evidence to answer clinical questions in a time efficient way followed by they were disagree that they can access the best resources in order to implement EBP. The researchers revealed that most of baccalaureate nurses had computer or technology skills that help them to search for evidence based practice related to clinical procedures but they haven't ability to select the best resources in order to implement EBP based on scientific rational that require scientific knowledge. Other study carried out on 391 nurses and allied healthcare providers in the Valais hospital, Switzerland by [29] in contrast with the present finding, the study revealed that most of the nurses agreed upon that "they can access the best resources in order to implement EBP" but with lowest score may be due to previous exposure to formal training regarding EBP in their clinical setting.

In relation to beliefs related to **time and difficulty** of EBP, the current study clarified that more than two thirds of nurses agreed that EBP takes too much time and is difficult to apply. These findings were congruent with other studies [33, 4]. Time limitation is a serious problem in utilization of research into clinical practice. Moreover, less time to read, analyze, implement and evaluate the effectiveness of evidence on clinical outcomes is so difficult to be measured. On the other hand cross sectional study done by [5] on 185 nurses reported that most nurses in the study "neither agreed nor disagreed" in relation to EBP is difficult and takes time. The researchers explained that most of baccalaureate nurses had studied the EBP in their nursing curriculum, so they had some knowledge related to EBP but they are unsure regarding applicability of EBP in clinical practice is difficult and takes time or not.

As regards to the relation between beliefs of the staff nurses related to the value, knowledge, resources and difficulty of EBP and **their ages**. The current study indicated that about two thirds of the nurses who ages less than 30 years agreed that EBP results in the best clinical care for patients, more than half of the same age group agreed that evidence-based guidelines can improve clinical care and implementing EBP will improve the care that they deliver to their patients, and also they can search for the best evidence to answer clinical questions in a time efficient way. Conclusion of the study findings revealed that the total percentage of agreement or strong or positive beliefs towards EBP were high in older nurses than younger nurses. The results of our study were matched with other study done by [4] who clarified that those nurses who are older have more positive beliefs towards EBP than younger nurses. This might be due to the older nurses were more exposed to clinical experiences and had more trainings which might have positive effect on their beliefs towards EBP.

In the current study, more than half of the nurses less than 30 years, disagreed about the clarity steps of EBP, their ability to implement EBP. In addition, less than half of them were neither agree nor disagree that EBP takes too much time and also is difficult to apply. The same percentage of the same age group disagreed regarding the care that they deliver is evidence based and their ability to measure the outcomes of clinical care. Other study in contrast with our study finding done by [27] pointed out that nurses younger than 40 years of age had a better understanding of EBP than older nurses. This might be due to incorporation of EBP in their curricula and teaching programs and also younger generation had more technology skills that help them to search and selects most appropriate EBP.

There were significant statistical differences in relation to their beliefs about EBP results in the best clinical care for patients, evidence-based guidelines can improve clinical care and also implementation of EBP sufficiently enough to make practice changes according to their ages. On the same vein, other study done by [34]revealed that there were statistical significant difference between strong belief of the nurses and years of clinical experiences, nurses who had 5 years or less nursing experience in the hospital (young nurses) were significantly more likely than nurses who had 16 or more years of experience (old nurses).

In relation to the relationship between the beliefs of the nurses related to the value, knowledge, resources and difficulty of EBP and their clinical experience years. The current study denoted that, there were positive correlation between nurses beliefs regarding EBP and their clinical experience in the following items, EBP results in the best clinical care for patients, evidence-based guidelines can improve clinical care, and also their ability to implement EBP where they work. In addition, they were clear about the steps of EBP, they can implement EBP and search for the best evidence to answer clinical questions in a time efficient way. Moreover, they can access the best resources in order to implement EBP. Finally, they can overcome barriers in implementing EBP. In this respect, [35] reported that there were significant positive correlations between years of experience and practice and attitudes toward EBP according to their cross sectional study on 600 nurses working in four governmental hospitals in Muscat, Oman.

The third section: focused on the barriers as perceived by the nurses related to utilization of research findings into clinical practice, professional and institutional barriers. According to barriers related to **utilization of research into clinical practice.** The current study demonstrated that, the majority of nurses agreed that the research is not reported clearly and readably, the amount of research information is overwhelming and the relevant literature is not compiled in one place, and also research articles are not published fast enough. More than two thirds of the nurses reported that research articles are not readily available, and has not been replicated. In the same stream, other study carried out by [20] denoted that difficulty of using the electronic data base, inability to evaluate the quality of research reports properly, and also difficulty in understanding the statistical analysis of research finding were considered as professional barriers. Moreover, [19]and [36] pointed out that lack of resources to search for best practice in the nursing field, old textbooks in libraries, lack of access to current research journals, and limited access to the internet were the most hindering factors for nurses to implement EBP.

In relation to **professional barriers**, the results of our study illustrated that more than two thirds of the study participants agreed that they are unaware of the research, they sees little benefit for self, they didn't feel enough authority to change patient care procedures. Around two thirds of nurses agreed that they didn't see the value of research for practice and they were unwilling to change/try new ideas, and about half of them didn't have time to read research. On the same line other study conducted by [26] reported that more than half of the nurses had an professional barriers as lack of time to read literature and also added lack of ability to work with computer, and insufficient proficiency in English language can hinder the implementation of EBP in the clinical practice.

As regards to **institutional barriers**, the findings of our study showed that more than two thirds of nurses agreed that other health care members are not supportive in implementation of EBP , there is insufficient time on the job to implement new ideas. Around two thirds of them reported that the physicians will not cooperate with implementation of EBP and administrators will not allow implementation. In the same line, other study done by [27] on 70 professional nurses in a private ICU, their finding reported that physicians were ranked as being the least supportive members in the ICU for EBP implementation. In contrast with our finding, other study reported that nurses ranked nursing colleagues as the most supportive members regarding EBP, followed by nurse managers in EBP implementation [37].

As regards to barrier related to application of EBP according to years of clinical experience, the current study illustrated that more than half of the nurses less than 6 years experience agreed that research articles are not readily available, they are not relevant to the nurse's practice and research has methodological inadequacies, implications for practice are not made clear and the relevant literature is not compiled in one place, statistical analyses are not understandable. In addition, research articles are not published fast enough, conclusions drawn from the research are not justified, literature reports conflicting results, research has not been replicated, research is not reported clearly and readably and research information is overwhelming.

Moreover, the same group reported that they didn't feel enough authority to change patient care procedures, they feels results are not generalizable to clinical setting, facilities are inadequate for implementation of EBP, physicians will not cooperate with implementation of EBP, administrators will not allow implementation, and also other staff are not supportive of implementation and there is insufficient time on the job to implement new ideas.

The researchers pointed out that the institutional systems have an essential role in decreasing this barrier and supporting the nurses to apply EBP in their clinical setting. This can be done by writing into contracts a certain period of time should be devoted to research implementation; giving more time for professional development. The second great barrier was nurse's lack of authority to change patient care procedures, maybe due to more than two thirds of them were **under 30** years of age in the low level of hierarchy were less likely to have authority to change or improve clinical practice as nurses who belong to higher levels of hierarchy and tend to be older. Nurses found it difficult to evaluate scientific articles, due to the lack of knowledge and education in research methods. Therefore, nursing curricula or formal training should be successful in transmitting the skills and knowledge that is required to implement EBP in the clinical practice.

There were significant statistical differences in selected items as research implications for practice are not made clear, statistical analyses are not understandable, literature reports conflicting results and research has not been replicated according to barriers of EBP application with reference to years of clinical experience. A study done by [28] agreed with the current study finding showed that a highly statistical significant relation was found between nurses' barriers toward EBP and years of experience.

There were no significant statistical differences in all items related to professional and institutional barriers among nurses according to their clinical experience years in the hospital. This finding is inconsistent with the study done by [26], where the older nurses that had more clinical experience years indicated that organizational aspects are important barriers more than younger nurses because older nurses may be aware that EBP should be done in clinical setting, they are more familiar with hospital system, policy and factors associated with use of EBP .

Conclusion of the study:

The current study revealed that the study participants viewed EBP positively and they had strong belief that practicing evidence based improves the quality of patient care. Their beliefs towards EBP tended to be more positive than their knowledge and practice of EBP. The most common barriers for adoption of EBP among nurses were no enough authority to change patient care procedures, no enough time to read research, administrators didn't allow implementation of EBP; in addition, researches had methodological inadequacies, unclear for practice, inadequate facilities for implementation of EBP and inability to understand statistical terms used in articles.

Recommendation of the study:

1- Health care services should encourage cooperation between academic faculty and clinical nurses.

2- Continuing education for baccalaureate nurses on the EBP implementation in the clinical setting.

3- Administrators should provide nurses time or decrease their workload to learn skills related to EBP and also provide expertise.

4- Administrators should develop basic online searching skills for nurses about health care information.

5- Equip clinical setting with libraries and Internet for online search of EBP.

6- Emphasis on clinical practice problems and protocols of care in nursing researches thus facilitating marketing and application of research findings

7- Research articles should be written in a simple, clear and concise manner to facilitate the application into daily practice.

Nursing Implication of the study:

Evidence based practice is fundamental to the professional practice of nursing. It provides the opportunity to effectively combine evidence with patient preferences and values, incorporate science into clinical practice, enhance quality health care, improve health outcomes, reduce health care costs and also implement the best patient's care knowledge for proper clinical decision making. Without current best evidence, practice becomes rapidly outdated. So, health care managers have responsibility to assist clinical nurses in narrowing the gap between evidence and its implementation.

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 1, pp: (1-18), Month: January - April 2019, Available at: www.noveltyjournals.com

REFERENCES

[1] Twigg,D. & Attree,M. (2014). Patient safety: Committing to learn and acting to improve. Nurse Education Today ; 34: 159–161 available at http://dx.doi.org/ 10.1016/j.nedt.11.002 Contents lists at Science Direct Nurse Education Today.

[2] Rouleau,G., Gagnon, M.P.& José Côté,J. (2015). Impacts of information and communication technologies on nursing care: an overview of systematic reviews (protocol). Syst Rev; 4: 75.

[3] Shafiei,E. Baratimarnani,A. Goharinezhad,S. Kalhor, R. & Azmal ,M.(2014). Nurses' perceptions of evidence-based practice: a quantitative study at a teaching hospital in Iran. Med J Islam Repub Iran; 28: 135.

[4] Cruz, J.p., Colet, P.C. ,Alquwez, N. , Alqubeilat, H., Bashtawi,M.A. Ahmed,E.A. & Cruz, C.P. (2016). Evidence-Based Practice Beliefs and Implementation among the Nursing Bridge Program Students of a Saudi University. Int J Health Sci (Qassim); 10 (3): 405–414.

[5] Stokke, K. , Olsen, N.R., Espehaug,B. & Nortvedt, M.W.(2014). Evidence based practice beliefs and implementation among nurses: a cross-sectional study.BMC Nurs; 13: 8. Published online 2014 Mar 25. doi: 10.1186/1472-6955-13-8.

[6] Naeem,S.B. Bhatti,R. Ishfaq,K.(2017).Nurses' Attitude and belief toward Evidence-Based Nursing Practices in Tertiary Care Hospitals of Multan, Pakistan. Isra Medical Journal ,9 (2).

[7] Melnyk, B. & Fineout-Overholt, E. (2015). Evidence-based practice in nursing & healthcare: A guide to best practice (3 rd ed.). Philadelphia, PA: Wolters Kluwer.

[8] Melnyk, B. M., Gallagher-Ford, L., Long, L. E., & Fineout-Overholt, E. (2014). Th establishment of evidence based practice competencies for practicing registered nurses and advanced practice nurses in real world clinical settings: Proficiencie to improve healthcare quality, reliability, patient outcomes, and costs. Worldviews on Evidence Based Nursing, 11(1), 5-15.

[9] John, S.M. (2016). Assessing Knowledge of Evidence-Based Practice among Nurses Walden Dissertations and Doctoral Studies. Walden University Available at http://scholarworks.waldenu.edu/dissertations.

[10] Zhou,F. , Hao,Y. Guo,H.& Liu, H.(2016). Attitude, Knowledge, and Practice on Evidence-Based Nursing among Registered Nurses in Traditional Chinese Medicine Hospitals: A Multiple Center Cross-Sectional Survey in China. Evid Based Complement Alternat Med. 5478086. Published online Jul 27. doi: [10.1155/2016/5478086]

[11] Majid,SH., Foo,S. , Luyt,B., Zhang,X. Theng, Y.L., Chang, Y.K.& Intan A Mokhtar,I.A., (2011). Adopting evidence-based practice in clinical decision making: nurses' perceptions, knowledge, and barriers.J Med Libr Assoc.; 99(3): 229–236.

[12] Zelenikova R, Jarosova D. (2014). Perception of the effectiveness of midwifery students. Cent. Eur. J. Nurs. Midwifery.; 5(4): 169-75.

[13] Mahmoud, M.A. (2013).Bachelor nurses' perception of the barriers and facilitators for implementing evidence-based nursing practice. Master's thesis. Web site: [http://erepository.cu.edu.eg/index.php/cutheses/thesis/ view/12751].

[14] Dalheim, A., Harthug, S., Nilsen, R.M. &Nortvedt, M.W. (2012).Factors influencing the development of evidence-based practice among nurses: a self-report survey. BMC Health Serv Res. ;12:367. doi: 10.1186/1472-6963-12 367.

[15] Berland A, Gundersen D, Bentsen SB. (2012).Evidence based practice in primary care – an explorative study of nurse practitioners in Norway. Nurs Educ Pract. doi:10.1016/j.nepr.2012.05.002.

[16] Tacia,L., Biskupski, K. Pheley, A. &Lehto, R. H.(2015). Identifying barriers to evidence-based practice adoption: A focus group study. Clinical Nursing Studies;3 (2).

[17] Hadgu,G. S., Almaz, S.& Tsehay (2015). Assessment of Nurses' Perceptions and Barriers on Evidence Based Practice in Tikur Anbessa Specialized Hospital Addis Ababa Ethiopia. American Journal of Nursing Science. 4 (3), pp. 73-83.

[18] Sredl, D.Melny, B. Hsueh, K. Ding, R. & Durham, J. (2011).Health care in crisis! Can nurse executives' beliefs about and implementation of evidence-based practice be key solutions in health care reform? Teaching and Learning in Nursing; 6(2), Pages 73-79

[19] Hassona, F.M., Winkelman, C. & El-Sayed, S.H. (2013). The effect of a workshop on Egyptian nurse educators' motivation and attitude toward evidence based teaching. Journal of Nursing Education and Practice, 3(10), 71.

[20] Hussein,A.H. & Hussein,R.G.(2013). The Attitudes and Barriers towards Evidence-Based Practice among Nursing Educators. J Am Sci; 9(12): 609-618.

[21] Rogers, E. (2003). Diffusion of Innovations. New York, NY: Free Press.

[22] Malcolm & Kimberly, A. (2016). "The Nurse Executive Role in Implementing Evidence Based Practice (EBP) at the Point of Care" .Doctoral Theses. Paper 16.

[23] Linde &Sandra M. (2015). "Evidence-Based Practice in Nursing".Master's Theses, Dissertations, Graduate Research and Major Papers Overview. Paper 147.

[24] Melnyk, B.M., Fineout-Overholt, E. & Mays,M.Z. (2008).The evidence-based practice beliefs and implementation scales: psychometric properties of two new instruments. Worldviews Evid Based Nurs;5 (4):208-16.

[25] Funk, S.G., Champagne, M.T., Wiese, R.A.&Tornquist, E.M. (1991).Barriers: the Barriers to Research Utilization Scale. Appl Nurs Res. 4:39–45.

[26] Khammarnia, M. ,Mohammadi, M.H.,Amani, Z., Rezaeian, S & Setoodehzadeh ,F. (2015). Barriers to Implementation of Evidence Based Practice in Zahedan Teaching Hospitals, Iran. Nurs Res Pract. 357140. Published online Mar 18. doi: 10.1155/2015/357140

[27] Jordan, P.J., Bowers,C.A.& Morton ,D.(2016).Barriers to implementing evidence-based practice in a private intensive care unit in the Eastern Cape. Southern African Journal of Critical Care 2016; 32(2):50.

[28] Mohsen ,M.M., Safaan,N.A. & Okby, O.M.(2016). Nurses' Perceptions and Barriers for Adoption of Evidence Based Practice in Primary Care: Bridging the Gap.American Journal of Nursing Research; 4(2): pp 25-33.

[29] Verloo ,H., Desmedt,M. & Morin,D. (2017). Beliefs and implementation of evidence based practice among nurses and allied healthcare providers in the Valais hospital,Switzerland. J Eval Clin Pract.;23:139–148.

[30] Williamson, K.M., Almaskari, M., Lester, Z.&Maguire, D.(2015). Utilization of evidence based practice knowledge, attitude, and skill of clinical nurses in the planning of professional development programming. Journal for Nurses in Professional Development;31(2):73–80.

[31] Chang, H.C., Jones, M.K.& Russell, C. (2013).Exploring attitudes and barriers toward the use of evidence based nursing among nurse managers in Taiwanese residential aged care facilities. J Gerontol Nurs ;39(2):36–42.

[32] Upton, D., Stephens, D., Williams, B. & Scurlock-Evans, L. (2014). Occupational therapists' attitudes, knowledge, and implementation of evidence-based practice: a systematic review of published research. British Journal of Occupational Therapy ;77(1):24–38.

[33] Shifaza, F., Evans, D. &Bradley, H. (2014). Nurses' Perceptions of barriers and facilitators to implement EBP in the Maldives. Advances in Nursing. Doi: http://dx.doi.org/10.1155/2014/698604.

[34] Saunders,H. Vehvila, K.& Julkunen,I.(2017) Nurses' Evidence-Based Practice Beliefs and the Role of Evidence-Based Practice Mentors at University Hospitals in Finland. Worldviews on Evidence-Based Nursing,; 14:1, 35–45.

[35] Ammouri, A. Raddaha, A. Dsouza, P. Geethakrishnan,R. Noronha, J. Obeidat,A. & Shakman, L. (2014). Evidence-Based Practice: Knowledge, attitudes, practice and perceived barriers among nurses in Oman. Sultan Qaboos Univ Med J.; 14(4): e537–e545.

[36] Zeb,A., Riaz,M., Emmanual,S., Rehman, N. Qudrat,S.& Rubina(2018). Barriers to Evidence Based Nursing Practice in Tertiary Care Hospitals of Peshawar, Pakistan

[37] Gerrish K, Cooke J. (2013).Factors influencing evidence-based practice among community nurses. JCommunity Nurs;27(4):98-101.