

BELIEFS AND IMPLEMENTATION OF EVIDENCE-BASED PRACTICE AMONG NURSES IN MARRAKECH- MOROCCO

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ABSTRACT

Introduction: Evidence-Based Practice (EBP) is considered a process for patients to receive the most effective care in a given setting. Despite the available evidence and positive beliefs about it, there are still many barriers for its implementation as a standard daily practice. The present study examined the beliefs and implementation of EBP among nurses in the prefecture of Marrakech. **Subjects & Methods:** A descriptive correlational study was conducted during June 2022. A self-administered questionnaire was administered to 326 practicing nurses in all public health sectors of Marrakech prefecture. The questionnaire included a section containing sociodemographic data and two validated scales on beliefs and EBP implementation. The association between sociodemographic characteristics, beliefs, and EBP implementation was studied using inferential statistics. **Results:** the participants had positive beliefs about EBP with a mean of 60.32(±8.42). However, they recognized that implementation of EBP in daily practice was low with a mean 24.8 (±17.1). In addition, A positive association between EBP-B and EBP-I scores was statistically demonstrated by linear regression ($r = .304$, $p < 0.001$): participants with positive beliefs about EBP are the most likely to implement it. The intensity of the relationship was low to medium. **Conclusion:** EBP is important in the nursing profession since it is constantly changing. In this study, the majority of nurses in Marrakech prefecture believe in the EBP, but this was not reflected in their clinical practice due to the lack of its implementation. This evaluation highlighted the importance of integrating EBP during nursing education and facilitating its implementation. The lack of decision-making autonomy among nurses may limit the development or change for a practice consequently the implementation of EBP.

Key words: Evidence Based Practice (EBP), Beliefs, Implementation, Nurse, Marrakech, Morocco.

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INTRODUCTION

According to the World Health Organization (WHO, 2000), the main objective of a healthcare system is to prevent, promote, and restore the health of population, therefore provide good quality care [1]. However, some authors indicated that 30% to 40% of patients do not receive healthcare services in line with the established scientific evidence [2]. Moreover, 20% to 30% of the provided care was unnecessary or even harmful [2]. That may be attributed to the lack of use of scientific research evidence in clinical practice, which influence, consequently, the quality and security of care [3].

Evidence-Based Practice (EBP) aims to improve healthcare continually. The EBP is defined as "*the conscientious, explicit and judicious use of current best evidence in making decisions about the healthcare of individual patients*" [4]. It integrates the best available scientific research evidence with professional expertise, context, preferences and patients' values [4]. EBP offers several benefits, including improved quality of care and patient outcomes, avoidance of unnecessary and/or unsafe patient care, and empowerment of clinicians who feel more satisfied with their role [5]. The integration of the EBP within clinical practice faces several challenges. However, many factors can support its development and

implementation, such positive beliefs in EBP which lead to a better and larger implementation [6]. Nurse empowerment and commitment to improving care are also mentioned as moderators of EBP implementation [7].

On the other hand, EBP use depends on available resources; workload and scheduling, practicing staff, access to computers, and to scientific research databases [8]. In addition, interdisciplinary communication and task distribution can impact EBP implementation [7].

The integration of EBP in the Moroccan context, particularly among nursing education is still weak, despite the inclusion of a curriculum on research methodology in all Moroccan nursing institutes programs. In this context, to our best knowledge, no study has addressed the implementation of EBP among Moroccan nurses. Hence, the present study aims to describe the beliefs regarding EBP and its implementation among practicing nurses in Marrakech prefecture in Morocco.

SUBJECTS & METHODS

Study design and Settings

This is a cross-sectional correlational study, conducted during June 2022. The study sample included practicing nurses in all public health sector of Marrakech prefecture working at the Mohammed 6 University Hospital, the Ibn Zohr Regional Hospital, Alantaki Hospital, M'hamid Community Hospital and the Saada Psychiatric Hospital. In addition to the 46 Primary Health Care Institutions (PHCI) of the Marrakesh prefecture. The targeted population was estimated at 2079 nurses, from which a sample of 326 nurses was selected. A stratified probability sampling method to collect data from participants was adopted. Head nurses were excluded from the study because they are not practicing nurses.

Data collection

A two sections questionnaire was used to collect data. The first section concerned sociodemographic characteristics relating to: age, gender, years of experience in the current department, highest degree and profile. The second section included the French version of the EBP- Beliefs (EBP-B) and EBP-Implementation (EBP-I) scales [9]. The EBP-B is a 16-item questionnaire using a 5-point Likert scale. It aims to measure individuals' beliefs about the EBP value and their implementation ability. Responses ranged from 1=

"Strongly disagree" to 5= "Strongly agree". The total scores range from 16 to 80, where higher scores indicate stronger beliefs in EBP. The EBP-I is a 17-item questionnaire using a 5-point frequency scale to measure how often nurses had performed specific EBP processes in the previous 8 weeks. Responses ranged from 0= "No activity in the past 8 weeks" to 4= "Activity performed 8 or more times". Total scores range from 0 to 68, where higher scores indicate more frequent practice of EBP processes.

Statistical analyses

Statistic Package for Social Science software (SPSS), version 25, was used for data analysis.

For continuous variables, the results are expressed as means, standard deviation (SD), and median. For categorical variables (gender, age category, highest level of instruction, number of years of experience, profile, place of work), the results are expressed as numbers and percentages. After checking for variables normal distribution through the Kolmogorov-Smirnov Z test with a $p < .001$. The association between the score obtained in the two scales EBP-B, EBP-I and the socio-demographic variables was tested by ANOVA test. The association between the EBP-B score and the EBP-I score was correlated with linear regression since normality was respected.

Ethical considerations

The anonymity of the participants and their free-choice to take part or not in the study were respected. The participants' consent was obtained by completing the study questionnaire. The study was authorized by the research directorate at the High Institute of Nursing and health Techniques (ISPITS) of Marrakech. Also, authorizations were issued by the delegate of the Ministry of Health and Social Protection and the General Director of the Marrakech University Hospital in order to collect data.

RESULTS

Socio-demographic characteristics of the participants:

61.3% of our sample was female. The average age was 33.5 (8.27) years. The most represented profile was polyvalent nurses (85%). Most of the participants (76.4%) studied in the former system of studies, called the Institute of Training for Health Careers (IFCS) and 87.7% of the participants had a bachelor's degree (**Table 1**).

Table 1: Socio-demographic characteristics of participants

Variables		N (%)
Age	Mean(SD)	33.5(±8.27)
	Max	59 years
	Min	22 years
Gender	Male	126(38.7)
	Female	200(61.3)
Profile	Polyvalent Nurse	277(85.0)
	Midwife	21(6.4)
	Healthcare technician	23(7.1)
	Physiotherapist	3(0.9)
	Social worker	2(0.6)
Nursing institute	IFCS	249(76.4)
	ISPITS	77(23.6)
Instruction Degree	Bachelor	286(87.7)
	Master	36(10.1)
	PhD	4(1.2)
Working Institution	Primary Healthcare Institutions	25(7.7)
	Regional and Community Hospitals	61(18.7)
	University Hospital	240(73.6)

IFCS: health career training institute, ISPITS: higher institute of nursing professions and health techniques.

The evidence-based practice beliefs Scale (EBP-B)

In the present study, the EBP-B scale had excellent internal consistency, with a Cronbach's alpha of 0.78. Total scores on the EBP- B scale ranged from 25 to 76, with a means of 60.32(±8.42). Item 1 ("I believe that evidence-based practice (EBP) offers better patient healthcare"), Item 4 (" I believe that critically appraising evidence is an important step in the EBP process"), Item 5 ("I am sure that evidence- based

guidelines can improve clinical care"), and Item 9 ("I am sure that implementing EBP will improve the care that I deliver to my patients") had a majority of positive ratings (median=5.0), with 81.9%, 80.1%, 84%, and 86.5% of responses respectively stating "rather agree" or "totally agree". In contrast, item 16, ("I believe that the care I provide is based on evidence") was reported as having a predominantly negative rating (median = 3.0) with 60% of responses disagreeing to neutral (**Table 2**)

Table 2: The total and relative scores for the EBP belief scale (N=326)

Scale items	Means (SD)	Median	Totally disagree	Rather agree	N(%)		
					No opinion	Rather agree	Totally agree
1. I believe that EBP results in the best clinical care for patients	4.36(±.92)	5.00	7(2.1)	4(1.2)	48(4.7)	72(22.1)	195(59.8)
2. I am clear about the steps of EBP	3.59(±.13)	4.00	20(6.1)	34(10.4)	80(24.5)	117(35.9)	75(23.0)
3. I am sure that I can implement EBP	3.99(±.94)	4.00	10(3.1)	8(2.5)	64(19.6)	137(42.0)	107(32.8)
4. I believe that critically appraising evidence is an important step in the EBP process	4.23(±.04)	5.00	12(3.7)	12(3.7)	41(12.6)	85(26.1)	176(54.0)
5. I am sure that evidence- based guidelines can improve clinical care	4.34(±.87)	5.00	6(1.8)	3(9)	43(13.2)	93(28.5)	181(55.5)
6. I believe that I can search for the best evidence to answer clinical questions in a time efficient way	3.87(±.97)	4.00	9(2.8)	22(6.7)	58(17.8)	150(46.0)	87(26.7)
7. I believe that I can overcome barriers to implementing EBP (EBP).	3.80(±.91)	4.00	6(1.8)	17(5.2)	85(26.1)	143(43.9)	75(23.0)
8. I am sure that I can implement EBP in a time-efficient way	3.62(±1.00)	4.00	10(3.1)	32(9.8)	91(27.9)	129(39.6)	64(19.6)
9. I am sure that implementing EBP will improve the care that I deliver to my patients	4.27(±.95)	5.00	12(3.7)	5(1.5)	27(8.3)	<u>118(36.2)</u>	164(50.3)
10. I am sure about how to measure the outcomes of clinical care	3.641(±.12)	4.00	13(4.0)	42(12.9)	82(25.2)	101(31.0)	88(27.0)
11. I believe that EBP takes too much time	3.75(±1.01)	4.00	11(3.4)	17(5.2)	100(30.7)	111(34.0)	87(26.7)
12. I am sure that I can access the best resources in order to implement EBP	3.60(±1.05)	4.00	10(3.1)	37(11.3)	102(31.3)	101(31.0)	76(23.3)
13. I believe EBP is difficult	3.08(±1.46)	3.00	75(23.0)	45(13.8)	47(14.4)	94(28.8)	65(19.9)
14. I know how to implement EBP sufficiently well to make changes to practice	3.59(±1.13)	4.00	20(6.1)	34(10.4)	80(24.5)	117(35.9)	75(23.0)
15. I am confident about my ability to implement EBP where I work	3.60(±1.05)	4.00	10(3.1)	37(11.3)	102(31.3)	101(31.0)	76(23.3)
16. I believe the care that I deliver is evidence- based	2.92(±1.46)	3.00	65(19.9)	91(27.9)	47(14.4)	48(14.7)	75(23.0)

The evidence based practice implementation Scale (EBP-I)

In the present study, the EBP-I scale had excellent internal consistency, with a Cronbach's alpha of 0.94. EBP-I scores ranged from 0 to 61 with a means of 24.8 (±17.1) and a median of 21. Table 3 represents the frequency of EBP-I item activity during the past 8 weeks. Item 5, "I collected data on a patient's problem," showed the highest score (med = 2.0). 29.1% of the

participants had collected data about a patient's problem more than eight times in the previous eight weeks. In contrast, item 12, "I have accessed the Cochrane Database of Systematic Reviews," had the lowest score (med = 0.0). 71.5% of the participants had not performed this activity in the previous 8 weeks. Also, 50% of respondents had never shared the scientific results of a research study with a patient or family member (item 9) in the previous 8 weeks (**Table 3**).

Table 3: Frequency of activity for EBP implementation items (N=326)

Scale items	Means (SD)	Median	N (%)				
			Never	1 - 3 times	4 - 5 times	6 - 7 times	More than 8 times
1. I used evidence to change my clinical practice.	1.92 ±1.46	2.00	65(19.9)	91(27.9)	47(14.4)	48(14.7)	75(23.0)
2. I critically appraised evidence from a research study	1.44±1.34	1.00	102(31.3)	93(28.5)	51(15.6)	45(13.8)	35(10.7)
3. I generated a PICO (Population, Intervention, Context/ Comparison, Outcome) question about my clinical practice	1.19±1.37	1.00	138(42.3)	92(28.2)	25(7.7)	35(10.7)	36(11.0)
4. I informally discussed evidence from a research study with a colleague	1.73±1.35	1.00	69(21.2)	96(29.4)	62(19.0)	49(15.0)	50(15.3)
5. I collected data on a patient problem	2.21±1.43	2.00	43(13.2)	83(25.5)	55(16.9)	50(15.3)	95(29.1)
6. I shared evidence from a study in the form of a report/presentation to more than two colleagues	1.24±1.33	1.00	129(39.6)	90(27.6)	35(10.7)	42(12.9)	30(9.2)
7. I evaluated the outcomes of a practice change	1.60±1.47	1.00	114(35.0)	53(16.3)	54(16.6)	58(17.8)	47(14.4)
8. I shared an EBP guideline with a colleague	1.52±1.51	1.00	112(34.4)	86(26.4)	35(10.7)	30(9.2)	63(19.3)
9. I shared evidence from a research study with a patient/family member	1.18±1.44	0.50	163(50.0)	52(16.0)	40(12.3)	31(9.5)	40(12.3)
10. I shared evidence from a research study with a multidisciplinary team member	1.45±1.47	1.00	124(38.0)	72(22.1)	34(10.4)	50(15.3)	46(14.1)
11. I read and critically appraised a clinical research study.	1.56±1.41	1.00	95(29.1)	92(28.2)	49(15.0)	40(12.3)	50(15.3)
12. I accessed the Cochrane database of systematic reviews	0.49±.93	0.00	233(71.5)	49(15.0)	29(8.9)	6(1.8)	9(2.8)
13. I used an EBP guideline/ systematic review to change clinical practice where I work	1.31±1.34	1.00	123(37.7)	84(25.8)	44(13.5)	44(13.5)	31(9.5)
14. I evaluated a care initiative by collecting patient outcome data	1.47±1.39	1.00	113(34.7)	65(19.9)	68(20.9)	39(12.0)	41(12.6)
15. I shared the outcome data collected with colleagues	1.34±1.38	1.00	123(37.7)	84(25.8)	41(12.6)	41(12.6)	37(11.3)
16. I changed practice based on patient outcome data	1.61±1.47	1.00	109(33.4)	62(19.0)	51(15.6)	54(16.6)	50(15.3)
17. I promoted the use of EBP to my colleagues	1.50±1.48	1.00	113(34.7)	81(24.8)	44(13.5)	30(9.2)	58(17.8)

Association between sociodemographic characteristics and EBP-B and EBP-I

Several associations between the sociodemographic characteristics, EBP-B and EBP-I scores were recorded. First, age showed a highly significant association with EBP-B mean score ($r_{age} = 0.177$, p

$<.001$). Also, a strong association between training institute and EBP-B mean score was observed ($F_{institute} = 9.02$, $p <.03$). Furthermore, an association of EBP-I mean score with the midwife profile ($F_{profile} = 5.72$, $p <.005$) was noticed. However, gender, instruction degree, and training institute did not show a significant association with EBP-B (**Table 4**).

Table 4: Association between socio demographic characteristics and EBP-B and EBP-I

Variable		N		Means (SD)		F		r		p	
		EBP-B	EBP-I	EBP-B	EBP-I	EBP-B	EBP-I	EBP-B	EBP-I	EBP-B	EBP-I
Age		326						.177**	-.106	.001	.055
Gender	Male	126		59.81±9.93	26.53±17.50	.736	2.00			.392	.15
	Female	200		60.64±7.33	23.78±16.84						
Institution	PHCI	25		61.24±6.82	25.08±19.81	.188	.277			.829	.758
	Regional and community hospitals	61		60.47±8.93	23.37±17.46						
	University hospital	240		60.18±8.47	25.20±16.79						
Profile	Polyvalent Nurse	277		60.71±8.71	24.73±16.91	1.953	5.721			.102	.001
	Midwife	21		59.47±2.80	32.19±15.34						
Nursing institute	Healthcare technician	23		55.86±7.97	16.26±15.51						
	IFCS	249		61.09±7.06	24.80±17.49	9.022	.006			.003	.936
	ISPITS	77		57.83±11.51	24.98±15.99						
Degree	Bachelor	286		60.06±8.42	24.13±16.98	1.186	2.234			.307	.109
	Master	36		61.88±8.67	29.33±18.30						
	PhD	4		64.25±3.59	35.25±3.77						

PHCI: Primary Healthcare Institutions, IFCS: health career training institute, ISPITS: higher institute of nursing professions and health techniques

Correlation between EBP beliefs and implementation

A positive association between EBP-B and EBP-I scores was statistically demonstrated by linear regression ($r = .304$, $p < 0.001$): participants with positive beliefs about EBP are the most likely to implement it. The intensity of the relationship was low to medium (**Figure 1**).

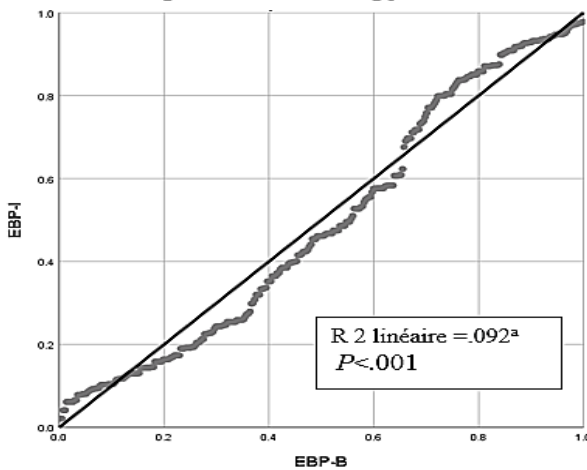


Figure 1: linear regression between EBP B and EBP I

DISCUSSION

The primary objective of the study was to describe the beliefs and the level of implementation of the EBP in the practice of nurses in the prefecture of Marrakesh, in Morocco. Secondary objectives were to explore potential explanatory factors for the EBP beliefs and implementation, and to examine the association between EBP beliefs and its implementation.

The study results revealed overwhelmingly positive beliefs about EBP among practicing nurses in Marrakech, with a mean score in EBP-B of 60.32 (± 8.42), which is higher than the score found in previous studies [10-12].

An association was found between several sociodemographic characteristics and EBP-B mean score, including age and training institute. This corroborates with Gentizon et al. (2016) study findings, which described that training and function were associated with EBP beliefs [10].

While the majority of the participants (74.8%) felt competent to apply the scientific results in their healthcare practice, only 54.3% felt confident in their ability to implement the EBP at their workplace. Moreover, although 81.9% of the participants believed that EBP can improve quality of healthcare, 60.7% declared that it was time-consuming and 48.7% stated that it was difficult to implement. These results may indicate a perceived lack of resources, time, and scientific authority to change clinical practices, as already suggested in previous studies [10, 12]. Yet, our participants had a strong belief that guidelines would improve clinical care (median =5). Indeed, guidelines could be viewed as easy-to-get ready to use information rather than consulting scientific papers and published literature. Hence, an attractive and clear guideline could promote a positive attitude and represent an effective tool to integrate evidence into practice through its accessibility and usability.

Regarding EBP implementation, the study results show that most respondents had used few EBP-related actions in the 8 weeks prior the study. The median total EBP-I score was 21, which is relatively low (maximum score = 61). This result corroborates with the study findings of Gentizon (2016) and Pereira (2018) who found similar scores among nurses in Switzerland [10, 11]. Some respondents shared scientific evidence during the last 8 weeks prior the study. This evidence sharing would help the community of nurses update their knowledge, which represents a positive attitude towards EBP that is often noted as a facilitating factor to its implementation. It is important that staff be convinced of the value of EBP to facilitate its implementation [13]. Access to evidence is an important element that is noted in several studies. Dogherty

(2013) describes the importance of having support to assist nurses in searching for evidence and having easier access to the scientific literature [14]. According to them, evidence must be accessible and easy to use.

72.7% of the participants stated that they can find the best scientific evidence to answer any clinical issue. However, 71.5% never accessed the Cochrane database in the last 08 weeks. This could be due to the fact that participants are not necessarily aware of implementing research in their practice, through lack of materials for access, or lack of autonomy to change a practice. These factors push practitioners to use pre-established protocols without seeking the updated changes.

It is worth noting that midwives were more prone to implement EBP than the other nurses' profiles. That can be explained by the advancement of the profession, in particular the development of the midwifery competency framework, which is an act of professional identity, allowing midwives more autonomy to make decisions in their daily practice.

A positive association ($r = .304^{**}$; $p < 0.001$) between EBP beliefs and its implementation was demonstrated in the current study. This result is in line with other studies findings that have used the EBP-B and EBP-I scales [10-12] and in accordance with the hypothesis of the scale's developers [15].

STRENGTHS & LIMITATIONS

This study provided an initial assessment of the status of beliefs and implementation of EBP among nurses in the Marrakech prefecture. The use of a self-administered questionnaire is potentially related to social desirability bias, also some factors related to EBP was not investigated in the current study, such as the skills needed to implement the EBP.

CONCLUSION

EBP is important in the nursing profession since it is constantly changing. In the present study, the majority of nurses in Marrakech prefecture held positive beliefs in EBP, but this was not reflected in their clinical practice due to the lack of its implementation. Hence, integrating EBP during nursing education would highly facilitate its implementation. Also, providing more decision-making autonomy among nurses may enhance the development or change for a better practice and consequently the implementation of EBP. It would be interesting to explore this topic further in a subsequent study focused on barriers and facilitators that would allow for the development of

strategies for implementing EBP in Moroccan healthcare institutions.

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REFERENCES

1. Koplan, J. P., Bond, T. C., Merson, M. H., Reddy, K. S., Rodriguez, M. H., Sewankambo, N. K., & Wasserheit, J. N. (2009). Towards a common definition of global health. *The Lancet*, 373 (9679), 1993-1995.
2. Grol R, Grimshaw J. From best evidence to best practice: effective implementation of change in patients' care. *The Lancet* 2003;362(9391):1225-30
3. Carré S. Etude de la satisfaction du patient et de son entourage en établissements de santé : https://usagers2017.sciencesconf.org/data/pages/20170609_presentation_Stephane_Carre.pdf
4. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ*. 1996; 312 (7023):71-2.
5. Melnyk BM. The evidence-based practice mentor: A promising strategy for implementing and sustaining EBP in healthcare systems. *Worldviews Evid Based Nurs*. 2007; 4: 123-5.
6. Verloo H, Desmedt M, Morin D. Beliefs and implementation of evidence-based practice among nurses and allied healthcare providers in the Valais hospital, Switzerland: Evidence-based practice in Valais. *J Eval Clin Pract*. 2017; 23 (1):139-48.
7. Jun J, Kovner CT, Stimpfel AW. Barriers and facilitators of nurses' use of clinical practice guidelines: An integrative review. *Int J Nurs Stud*. 2016;60: 54-68.
8. Upton D, Upton P. Development of an Evidence-Based Practice Questionnaire for nurses. *J Adv Nurs*. 2006; 53: 454-8.
9. Verloo H, Desmedt M, Morin D. Adaptation and validation of the Evidence-Based Practice Belief and Implementation scales for French-speaking Swiss nurses and allied healthcare providers. *J Clin Nurs*. 2017; 26 (17-18):2735-43.
10. Gentizon et al, 2016. La pratique fondée sur des preuves chez les infirmières de centres hospitaliers universitaires en Suisse romande : étude descriptive et corrélacionnelle | Cairn.info [Internet]. [cited sept 23, 2022]. Disponible sur: <https://www.cairn.info/revue-recherche-en-soins-infirmiers-2016-4-page-28.htm?ref=doi>
11. Pereira F, Pellaux V, Verloo H. Beliefs and implementation of evidence-based practice among community health nurses: A cross-sectional descriptive study. *J Clin Nurs*. 2018; 27 (9-10): 2052-61.
12. Verloo H, Desmedt M, Morin D. Beliefs and implementation of evidence-based practice among nurses and allied healthcare providers in the Valais hospital, Switzerland: Evidence-based practice in Valais. *J Eval Clin Pract*. 2017; 23(1):139-48.
13. Ring N, Malcolm C, Coull A, Murphy-Black T, Watterson A. Nursing best practice statements: an exploration of their implementation in clinical practice. *J Clin Nurs*. 2005; 14(9):1048-58.
14. Dogherty EJ, Harrison MB, Graham ID, Vandyk AD, Keeping-Burke L. Turning knowledge into action at the point-of-care: the collective experience of nurses facilitating the implementation of evidence-based practice. *Worldviews Evid Based Nurs*. 2013; 10 (3):129-39.
15. Melnyk BM, Fineout-Overholt E, Mays MZ. The Evidence-Based Practice Beliefs and Implementation Scales: Psychometric Properties of Two New Instruments. *Worldviews Evid Based Nurs*. 2008;5(4):208-16.

