Evaluation of Nurses' Evidence-based Practice at Primary Health Care Centers in Baghdad City

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Abstract

Objectives: The study aims at evaluating the nurses' evidence-based practices at primary health care centers in Baghdad City.

Methodology: A descriptive design is carried out at Baghdad City's primary health care centers from January 2en 2019 to June 1st 2020. One instrument is developed for the purpose of the study. A Non-probability, multi-stage purposive sample of (52) staff nurses, who are working at primary health care centers in Baghdad City**.** The instrument is concerned with the evaluation of nurses' evidence-based practices through (43) items which are divided in to five main domains of attitudes, knowledge, beliefs, readiness and applications of evidence-based practices. Content validity of the questionnaire is determined by panel of (10) experts and Internal consistency reliability, Split-half technique, is obtained through Cronbach alpha correlation coefficient. Data are collected through the use of the study instrument and the interview technique as means of data collection. Data are analyzed through the use of descriptive statistical data analysis approach of frequencies, percentages, total scores and ranges.

Results: The study findings indicate that the majority of the staff nurses have experienced poor level of knowledge, attitudes, beliefs, readiness and application as dimensions of nurses' evidence-based practices.

Conclusion: The study findings depict that staff nurses have experienced inadequate evidence-based practices at primary health care centers.

Recommendation: Planned training sessions can be designed, constructed and implemented to staff nurses at the primary health care centers relative to evidence-based practices.

Keyword: *Staff Nurse; Evidence-based Practice; Primary Health Care Centers*

Introduction

The effect of evidence-based practices (EBP) has reverberated crosswise nursing practice, education, and science. The call for evidence-based quality improvement and healthcare transformation underscores the need for redesigning care that is effective, safe, and efficient. In line with multiple direction-setting recommendations from national experts, nurses have responded to launch initiatives that maximize the valuable contributions that nurses have made, can make, and will make, to fully deliver on the promise of EBP. Such initiatives include practice adoption; education and curricular realignment; model and theory development; scientific engagement in the new fields of research; and development of a national research network to study improvement [(1)].

Evidence-based nursing care is informed by research findings, clinical expertise, and patients' values, and its use can improve patients' outcomes. Use of research evidence in clinical practice is an expected standard of practice for nurses and health care organizations, but numerous barriers exist that create a gap between new knowledge and implementation of that knowledge to improve patient care. To help close that gap, the American Association of Critical-Care Nurses has developed many resources for clinicians, including practice alerts and a hierarchal rating system for levels of evidence. Using

the levels of evidence, nurses can determine the strength of research studies, assess the findings, and evaluate the evidence for potential implementation into best practice. Evidence-based nursing care is a lifelong approach to clinical decision making and excellence in practice [2].

The nursing research pyramid, or nursing research hierarchy of evidence, provides a visual and systematic depiction of forms of research from the least reliable (base) to the most reliable (apex). The pyramid includes both qualitative and quantitative paradigms. Pyramids vary slightly from source to source which can be confusing. To further add to the varying hierarchies "there is currently no universally agreed upon hierarchy of evidence for study types that seek to answer questions about patient's experiences and concerns [3].

Methodology

A descriptive design, using evaluation approach, is carried throughout the present study to evaluate the evidence-based practices in primary health care centers for the period of January 2nd 2019 to June 1st 2020.

The present study is conducted on (20) primary health care centers which are distributed as (5) main and (5) family medicine at Al-Russafa Health Directorate in Baghdad City and (5) main and (5) family medicine at Al-Karkh Health Directorate in Baghdad City.

A Non-probability, multi-stage purposive sample of (52) staff nurses who are working at primary health care centers in Baghdad. These nurses are selected based on the following criteria:

1. Staff nurses, of all nursing educational background, who are working at the primary health care centers.

2. Staff nurses of both genders.

A questionnaire is developed for the purpose of the study. It is presented as follows [4]:

Part I: Socio-Demographic Characteristics: Such characteristics include age, gender, education and years of employment.

Part II: Evaluation of Nurses' Evidence-Based Practices: It is comprised of (46) item that measure staff nurses' knowledge, attitudes, beliefs, readiness and application of evidence-based practices.

A pilot study is conducted for the determination of the questionnaires' internal consistency reliability and content validity for the period of 15th January 2019 to 25th February 2019. Content validity of questionnaire is determined by panel of (10) experts. Internal consistency reliability, Split-half technique, is employed for the Nurses' Evidence- based questionnaire. Cronbach alpha correlation coefficient is computed on responses of (10) staff nurses and it indicates that (r= 0.86) which is adequate.

Data are collected through the use of the study questionnaires as means of data collection. Each interview takes approximately (5-10) minutes to be completed.

The data are analyzed through the use of descriptive statistical data analysis approach of frequencies, percentages, total scores and ranges.

Results

Table (1): Overall Evaluation of Dimensions of Staff Nurses' Evidence-based Practices

List	Overall Evaluation		
	Scale	F	%
1	Poor (44-68)	50	96.15
2	Fair (69-93)	2	3.846
3	Good (94-118)	0	0
	Total	52	100%

Results out of this table indicate that the majority of the nurses have poor level of overall evaluation of the dimensions of nurses' evidence-based practices (96.15%).

Table (2): Evaluation of Nurses' Knowledge as Dimension of Evidence-based Practices

List	Knowledge		
	Scale	F	%
	Poor (14-18)	47	90.38
2	Fair (19-23)	3	5.769
3	Good (24-28)	2	3.846
	Total	52	100

Results out of this table reveal the majority of the nurses have poor level of knowledge evaluation as dimensions of nurses' evidence-based practices (90.38%).

Table (3): Evaluation of Staff Nurses' Attitudes as Dimension of Evidence-based Practices

List	Attitudes		
	Scale	F	%
1	Poor (4-6)	45	86.54
2	Fair (7-9)	6	11.54
3	Good (10-12)	1	1.923
	Total	52	100

Results out of this table show the majority of the nurses have poor level of attitudes evaluation as dimensions of nurses' evidence-based practices (86.54%).

Table (4): Evaluation of Staff Nurses' beliefs as Dimension of Evidence-based Practices

List	Beliefs		
	Scale	F	
1	Poor (14-23)	50	96.15
2	Fair (24-32)	2	3.846
3	Good (33-42)	0	0
	Total	52	100

Results out of this table indicate the majority of the nurses have poor level of beliefs evaluation as dimensions of nurses' evidence-based practices (96.15%).

Table (5): Evaluation of Staff Nurses' Readiness as Dimension of Evidence- based Practices

List	Readiness		
	Scale	**F**	
1	Poor (7-11)	50	96.15
2	Fair (12-16)	2	3.846
3	Good (17-21)	0	0
	Total	52	100

Result out of this table present the majority of the nurses have poor level of readiness evaluation as dimensions of nurses' evidence-based practices (96.15%).

Table (6): Evaluation of Staff Nurses' Application as Dimension of Evidence-Based Practices

List	Application		
	Scale	**F**	**%**
1	Poor (5-8)	49	94.23
2	Fair (9-11)	3	5.769
3	Good (12-15)	0	0
	Total	52	100

Results out of this table depict the majority of the nurses have poor level of application evaluation as dimensions of nurses' evidence-based practices (94.23%).

Discussion

1. Overall evaluation

Analysis of overall evaluation of such practices reveals that most of staff nurses have poor level of evidence-based practices (Table 1). This finding provides evidence that such poor level of evidence-based practices has emerged due to their insufficient background and training relative to this issue.

A cross-sectional study aimed at measure the evidence-based practice beliefs and implementation among Saudi nursing students enrolled in the bridge program, and also sought to identify the factors that influence evidence-based practice beliefs and implementation. A convenience sample of (188) nursing bridge program students at Saudi university is selected. The findings of the study depict that very low overall mean score of (22.57) is reported by the respondent in the implementation of evidence-based practice [(5)].

2. Evaluation of Staff Nurses' Knowledge

Analysis of such evaluation depicts that most of staff nurses have poor level of knowledge about evidence-based practices (Table 2). Such finding presents evidence that these staff nurses do not pursue sufficient knowledge about this issue.

A quasi-experimental study conducted to determine the effect of an educational program on nursing interns' EBP attitudes, knowledge and skills. A convenience sample of (40) nursing interns is selected. The finding of the study indicates that less than half of the study subjects have fair level of knowledge about EBP in the pretest. However, in the post test, the majority of the study subjects have good level knowledge about EBP after implementing the program [(6)].

3. Evaluation of Staff Nurses' Attitudes

Analysis of such evaluation indicates that most of

staff nurses have poor level of attitudes (Table 3). This finding can be interpreted in a way that these nurses are not well oriented toward the issue of evidence- based practices.

A quasi-experimental study is carried out to determine the effect of an educational program on nursing interns' EBP attitudes, knowledge and skills. A convenience sample of (40) nursing interns is selected. The finding of the study depicts that the majority of the study subjects have positive attitudes toward EBP post the program execution [6].

3. **Evaluation of Staff Nurses' Beliefs**

Analysis of such evaluation presents that most of nurses have poor level of beliefs (Table 4). This can be interpreted in a way that staff nurses have experienced lack of beliefs concerning the evidence- based practices.

A descriptive comparative design conducted. A sample of (185) nurses is selected to evaluate EPB belief and implementation. The finding of the study depicts that the nurses have positive beliefs toward EBP, but only practiced it to a small extend. There is a positive correlation between beliefs towards evidence-based practice and implementation of evidence-based practice ($r=0.59$, $p=0.001$) [7].

4. **Evaluation of Staff Nurses' Readiness**

Analysis of such evaluation depicts that most of nurses have poor level of readiness (Table 5). This can be interpreted in a manner that the nurses have no readiness towards evidence-based practices.

A cross-sectional survey conducted to evaluate safety climate and readiness for implementation of evidence and person centered practice. A sample of (726) nurses who work at surgical words in Swedish university hospitals is selected. The finding of the study reveals that the safety climate is positively related to readiness for evidence-based and person centered care [8].

5. **Evaluation of Staff Nurses' Application**

Analysis of such evaluation indicates that most of staff nurses have poor level of application of evidence-based practices (Table 6). This can be interpreted in a way that these nurses have no ability to easily apply the evidence-based practices.

A cross-sectional study conducted on Quota "non-probability" sample of (220) nurses who work at teaching hospital in Kuala Lumpur is selected to assessment attitudes towards knowledge for nurses who are use EBP. The finding of the study indicates that the application of EBP in clinical setting increase the quality of patient care. Clients' outcome and nurses' job satisfaction and retention, nursing managers and authorities have an important role in providing supports [9].

Conclusion

1. The majority of the staff nurses have misplaced the opportunity to be involved in training sessions on evidence-based practices. So, their performance has been adversely influenced.

2. The study findings depict that staff nurses have experienced inadequate evidence-based practices at primary health care centers.

3. Few staff nurses have readiness to apply evidence-based practices, but unfortunately they experience lack of orientation on how to seek it.

4. Primary health care centers nurses thought that the evidence-based practices require time frame and resources.

Recommendations

1. Planned training sessions can be designed, constructed and implemented to staff nurses at the primary health care centers relative to evidence-based practices.

2. Staff nurses can be encouraged and supported to be engaged in special training sessions about evidence-based practices.

3. Nursing Curriculums can encompass courses that address issues related to evidence-based practice.

4. The Evidence-based practices' policies can be activated and developed by the health authority in the Ministry of Health and Environment.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Ministry of Health and Environment and all experiments were carried out in accordance with approved guidelines.

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