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Barriers and Facilitators Implementation of Evidence-Based Nursing practice in Hospitals: A Literature Review

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ABSTRACT

Evidence-based practice (EBP) is imperative for ensuring nursing care obtained by patients who free from bias. The paper reports a study to determine barriers and facilitators the implementation of EBP both individuals and organizations in hospitals. The data for all items employed in this writing used a study literature review, from several databases, namely ScienceDirect, ResearchGate, and Google Scholar. Stand for 22 journals that met the inclusion criteria. The results of the literature review study clearly show: that attitudes and beliefs, knowledge about EBP, a capability to interpret faithful journals, nurses' demographic characteristics including the level of education, work experience, and age influenced the implementation of EBP. At the organizational level, the obstacles in implementing EBP consist of facilities and infrastructure, leadership, conflict, group dynamics, workplace, and organizational culture, lack of human resources, workload, lack of time, lack of internet access, the need for role models in the implementation of EBP. The results clearly showed that the implementation of evidence-based practice was a complex structure where the support of both individuals and organizations was very influential. It was necessary at the individual level to increase knowledge and skills in implementing EBP. However, workplace organizational management and strategic support integrated into the hospital's vision became the initial capital in implementing EBP.

Keywords: Evidence-Based Practice, Hospitals, Facilitators, Barriers, Readiness, Culture

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BACKGROUND

Evidence-based practice is defined as "a problem-solving approach to clinical decision making that combines the search for the best and most recent evidence, clinical expertise and judgment, and preferences of patient values in the context of nursing" (Melnyk, 2003). Melnyk and Fineout-Overholt (2015) conceptualize EBP as a method that allows healthcare providers to provide maximum quality care when handling varied requests from patients and families. Both of these definitions reflect the use of problem-solving with clinical involvement and patient contributions. Rutledge and Grant (2002) delineated EBP as "the best treatment that integrates scientific evidence with clinical expertise, pathophysiological knowledge, psychosocial problem knowledge, and decision-making preferences of patients." It is to be noted that this definition combines pathophysiological ideas and psychosocial components.

In 2016, Melnyk revealed that the implementation of EBP in independent practice and hospitals was still relatively low. In another survey, even more than one-third of hospitals in the United States did not meet the criteria for measuring EBP implementation (Pittman et al., 2019). Meanwhile referring to (Weng, Kuo, Yang, Lo, et al., 2013) whose conducted an EBP study at a Taiwanese hospital found that although nurses had a significant level of confidence in EBP, it was the lowest when compared to other disciplines. There have been many studies conducted in various countries focusing on the exploration of variables that influence the implementation of nurse EBP in hospitals, therefore in this review, a mapping of factors affecting the implementation of nurse EBP in hospitals will focus on the individual and organizational level. It counted on that this can increase knowledge about nursing management, evidence-based quality supplement, and also a science-based implementation of hospital leadership.

METHODS

Cross-sectional data comprehensively collected and analyzed from December 2019 until March 2020 using the PRISMA method. The steps in the PRISMA method are: Define eligibility criteria:

Inclusion criterion 1: English article/ journal approval

Inclusion criterion 2: on organizational division, evidence-based practice, nursing, hospital.

Information sources;

The search was carried out through a research database search online, google scholar, and ScienceDirect with the approval of the last ten years of publication.

Studio selection:

Studio selection was carried out in four phases, namely:

- a. Keyword search, keywords used are evidence of underlying nursing practice, EBP implementation, EBP implementation factors, EBP Constraints
- b. Exploring and selecting the title, abstract, and keywords of the article adjusted to the specified inclusion criteria
- c. The journal reads according to the journal criteria that conformity with the specified inclusion criteria.
- d. See the article reference list to find other related articles.

Data collection / data collection process

Data collection, selecting articles according to a type of article, journal name, year, topic, title, keywords, research collection.

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Selection of data/ data items

Information published in each journal consists of:

a) Demographics of articles that provide information by applying the evidence-based nursing practice.

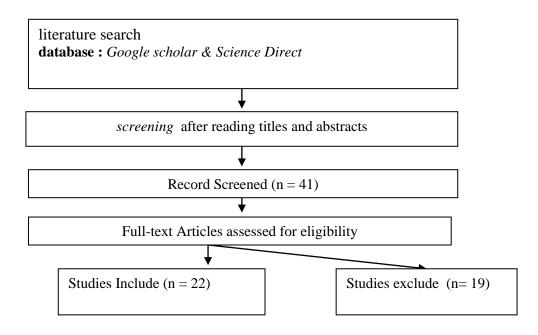


Fig. 1 The Flow Chart describing details of literature search and selection Strategi

RESULTS

Study selection

Search results obtained by 22 articles.

Study characteristics

The data consisted of 22 English journal articles

Artycle type	Publisher title	Number of Articles	Total Number of Articles
Journal	BMC Medical Education	2	22
	BMC health services research	1	
	Worldviews on Evidence-Based Nursing	3	
	Journal Global Health	1	
	Nursing Research and Practice	1	
	Oman Medical Journal	1	
	Healthcare Basel, Switzerland	1	
	Netherlands Journal of Medicine	1	
	Journal of the Medical Library Association	1	
	International Journal of Management and Social Sciences Research (IJMSSR)	1	
	Nursing and Health Sciences	1	
	Applied Nursing Research	1	
	Journal of Korean Academy of Nursing	1	

1506

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Journal of Advanced Nursing	1
Journal of Nursing Management	1
BMC Nursing	2
Implementation Science	1
PLoS ONE	1
Australian College of Nursing Ltd	1

Table 1. Selected data sources

Implementation of EBP nurses on an individual level: The level of nurses' confidence in the importance of evidence-based practice becomes a positive value in implementing, this from several studies conducted in various countries such as Korea, China, Greece, Iraq, Oman, and Singapore (Majid et al., 2011; Khammarnia et al., 2015; Patelarou et al., 2016; Al-Busaidi et al., 2019; Chen et al., 2019; Yoo et al., 2019) suggested that nurses' confidence in EBP was quite high. In this series of studies, it clearly showed the nurse population alone so that data showing nurses' belief in EBP in high significant values but research conducted in Taiwan (Weng, Kuo, Yang, Lo, et al., 2013) by looking at EBP confidence comparisons on the multi profession. It found that EBP belief in nurses was the lowest when compared to doctors, pharmacists, physiotherapists, and other personnel. From various other EBP implementation studies, it shows that high confidence alone is not enough. Also, many nurses believe that implementation of EBP could improve the quality of nursing care but then ambushed in the exertion of hereditary nursing in force in the unit/ hospital where they work (Melnyk et al., 2016). In other words, the level of confidence of individual nurses working in health services will be affected by what they see through the real experience of individuals, it believes can be increased through other interventions at the level of the group and or organizational culture (Stetler et al., 2014).

Two different studies conducted in South Korea (Park and Jang, 2016; Yoo et al., 2019) showed that there positively increased in EBP on the knowledge/ skills of EBP of Korean nurses. In contrast to research conducted in Greece (Patelarou et al., 2016) reported that half of the nurses said they were not sure of their ability to be involved in EBP. The EBP knowledge/ skill variable is also one of the clinical nurse demographic factors that carried out at different times and places that will determine the various findings. By referring to Hauck, Winsett, and Kuric, 2013; Weng, Kuo, Yang, Lo, et al., 2013; Pittman et al., 2019. The level of education also influences EBP knowledge. It is not surprising if you look at nursing education facilities in various countries. These findings show a positive relationship with a nursing education that has very diverse levels such as vocational, associations of specialist nurses increasing EBP with the same standards will produce significant differences between nurses. This conformity with the findings (Yoo and Linger) that nurses with a bachelor's degree have significance with vocational nurses and nurses who have taken EBP classes are also more essential than those who do not. Hence, other factors that influence knowledge related to demographics are also sourced in the length of work (Al-Busaidi et al., 2019) so that in studies that use the following two simultaneously variables use filed multilevel regression submission, changed with more pure variables. In research conducted (Pittman et al., 2019). Suggesting young nurses is more difficult in the application of new tactics, and discussed in other demographic discussions such as age and year-old obtained from the results of Dalheim et al., 2012.

Other factors were revealed by (Majid et al., 2011; Dalheim et al., 2012; Weng, Kuo, Yang, Liao, et al., 2013; Khammarnia et al., 2015; Gifford et al., 2018) that nurses

1507

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had difficulty find and interpret scientific journals both because of language differences, lack of understanding of statistics and use of scientific terms in research. In commonplace, this is the weakness of supporting individual nurses who are not related to technical skills in nursing. This constraint can be directly correlated if revealed to the previous variable with the level of education of nurses by looking at the national curriculum of nursing in various countries. Other findings by (Gifford et al., 2018) that nurses feel scared in implementing EBP because patients will be angry with actions that are considered non-traditional and become exercise material. The lack of communicating and building a relationship and trust between nurses and patients. It could be the factor in this consideration of the emergence of the result regardless of culture. It adopted by the community in the country or research area. Another solution could be to strengthen collaborative interprofessional reinforcement so that all caregivers have the same understanding so that it is easier to educate new EBP-based actions without having to incite the wrong perception of patients.

Implementation of nurse EBP at the organizational level: Organizational readiness in fostering a culture of evidence-based practice is a necessary factor with a broad scope. Organizational readiness in question can include facilities and infrastructure, support of organizational leadership, as well as strategic issues in the organization's strategic plan going forward. The affair of owner support to hospital executives becomes a determining factor for the implementation of EBP with satisfying policies to the integration of future strategic ideas, it can foster an organizational culture that supports evidence-based practice. (John R. Giudicessi, BA. Michael J. Germany., 2008; Dogherty et al., 2013; Nguyen and Wilson, 2016; Gifford et al., 2018; Sharplin et al., 2019).

In the research conducted (Dogherty et al., 2013) barriers to the implementation of EBP in conflict organizational relations, coordination and politics, and teamwork, while (Patelarou et al., 2016) on group decision making and according to (Nguyen and Wilson, 2016) Sharplin et al., 2019) on nursing care. The conflict of transpiring not only with nurse participants but also among professions that affected in implementing EBP on the grounds of who chooses to intervene. Although in the practice of the limit of the undertaking can be accomplished. It was very challenging in the concept of a patient center wherein the development and implementation of EBP is a multidisciplinary effort. One of the most important is the composition of the team that was made carefully, such as paying attention to the education level of the EBP team in the framework of the equalization of knowledge, facilitating discussion and communication. Overall, the problems found at this level drawn a particular variable that has broad and correlation with other leadership. The role of functional leaders can be a guide, inspiration, and role models n implementation and is not limited to these utilitarian leaders remain on the predetermined path such as motivating, feedback according to functions at the implementation stage.

On the other hand, it supports organizations in enhancing capabilities and facilitates research on factors that support the increase in the number of nurses through training concerning EBP to add facilitators and EBP groups in hospitals (Majid et al., 2011; Hauck, Winsett and Kuric, 2013; Weng, Kuo, Yang, Lo, et al., 2013; Chen et al., 2019). All items employed in examples of assistance through the creation of EBP groups. The research conducted in Korea, contrary to research, organizations, learners, and organizations related to statistics do not correlate with the implementation of EBP (Park and Jang, 2016) and more on beliefs and knowledge at the individual level that has the optimum role. In another Korean study stated that the combination of organizational

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readiness supported by good EBP knowledge was a significant predictor of 22.2% of the various variables.

In addition, this culture associated to compare all facilities and infrastructures such as the library to connect the internet in the approval treatment unit. (Khammarnia et al., 2015; Gifford et al., 2018). The classic problem of the HR deficit is also an applied factor in the implementation of EBP culture where an increase in work costs leads to increase in EBP levels: an increase in nurses' work towards EBP, increasing the trial of nurses to increase training or end scientific discussion (Majid et al., 2011; Ubbink et al., 2011; Dalheim et al., 2012; Dogherty et al., 2013; Khammarnia et al., 2015; Sharplin et al., 2019.

CONCLUSION

The findings from this study found that the implementation of evidence-based practice is a complex structure where the support of both individuals and organizations that is very influential. Whereas, creating an EBP culture starting with organizational governance that has the full support of hospital executives, budgeting, the work environment to individual nurse competencies is the best key strategy. A slightly expanded version of the various variables found, the most significant correlation in implementing and maintaining EBP culture was at the point of the group and peculiarly in leadership. Leadership earns a big role because it is not limited to technical implementation but is included in the strategic leadership ranks. Integrated vital support in the hospital's vision becomes a large-scale capital for initial employment, and the rendition of leaders at the functional level will perform the role of technical implementation through supervisory functions, role models, feedback, and structured evaluation.

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