

IMPLEMENTATION STRATEGY OF EVIDENCE-BASED PRACTICE IN NURSING: AN INTEGRATIVE REVIEW

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ABSTRACT

Evidence-based practice (EBP) in nursing practice is one way to solve nursing problems based on existing research evidence. Implementation of EBP must be organized properly so that the expected results are also good. This integrative review aimed to identify the literature implementing EBP and barriers to EBP implementation. An integrative review was conducted using the Whittemore and Knafi approach. Results: EBP can be implemented to overcome problems in nursing interventions, use new instruments, and test regulations related to nursing practice. Implementation of EBP using an appropriate framework can improve implementation outcomes. EBP can provide opportunities for nurses to solve problems encountered in nursing practice.

Keywords: appropriate framework; evidence-based practice; implementation strategy

INTRODUCTION

The development of science, especially in the world of nursing, certainly affects the implementation of nursing practice. Evidence-based practice (EBP) in nursing practice is one way of using evidence to assist in decision-making in nursing practice. (LoBiondo-Wood et al., 2018). EBP seeks to answer questions based on the patient's clinical condition with current research evidence relevant to the problem (Godshall, 2019). (Godshall, 2019). EBP is a process of problem-solving to achieve best practices. (Novieastari et al., 2020).. EBP can be used to provide evidence-based solutions to problems we encounter in nursing practice. The use of EBP has a positive influence on nursing practice. Some nurses believe the implementation of EBP will have a positive impact on their job satisfaction and work quality. (Bjuresäter et al., 2018).. The application of EBP in nursing practice can improve patient care outcomes, so the application of EBP is considered necessary. (Connor et al., 2023). Implementing EBP can influence care.

Although there is a positive influence, implementing EBP will indeed find obstacles. Deficiencies in nurses' knowledge, skills, and lack of experience in implementing EBP can be obstacles to implementing EBP in care. (Alatawi et al., 2020). The results showed that nurses who have low EBP competence have the effect of creating a low EBP culture as well. (Melnyk et al., 2018).. In addition to the lack of EBP competence, lack of time, unavailability of manager support, and unavailability of resources that can be used in implementing EBP can also be an obstacle to the implementation of EBP (Clarke et al., 2021). (Clarke et al., 2021). Nurses' experience in implementing EBP can also affect the implementation of EBP (Dagne & Beshah, 2021). (Dagne & Beshah, 2021). These barriers can impact the implementation of EBP, and steps can be taken to overcome them. In preparing for the implementation of EBP, of course, several steps can be taken to help with its implementation. Providing training to nurses before implementing EBP can improve the results of EBP implementation. (Mathieson et al., 2019).. Increasing nurses' knowledge and skills related to EBP positively affects the application of EBP in nursing practice.

(Adamakidou et al., 2023).. The involvement of nursing managers or organizations can also provide support in preparing for EBP implementation. (Hosseini-Moghaddam et al., 2023).. The fundamental strategy in implementing EBP is to create an EBP crocodile starting from organizational governance by getting leadership support, budget support, and work environment support as well as increasing individual competence. (Swito & Sidin, 2020). These things can increase the success rate of EBP implementation. To facilitate the implementation of EBP, implementers should use a framework/model that serves to guide the implementation of EBP. Some comprehensive models of EBP implementation that already exist include the ACE Start Model of Knowledge Transformation, Advancing Research and Clinical Practice Through Close Collaboration (ARCC Model), Clinical Nurse Scholar Model, Diffusion of Innovations Theory, Iowa Model of Evidence-Based Practice to Promote Quality Health Care, Johns Hopkins Nursing Evidence-Based Practice Model, Model for Change to Evidence-Based Practice, Promoting Action on Research Implementation in Health Services (PARIHS Model), and Stetler Model of Research Utilization. These models have different steps and procedures (Godshall, 2019). Another model available is the Joanna Briggs Institute Practical Application of Clinical Evidence System (JBI PACES), designed to assist implementation and includes evidence-based audit and feedback (JBI, 2022). (JBI, 2022). Implementing frameworks can describe, guide, analyze, and evaluate progress in implementing EBP. (Moullin et al., 2020).. Good EBP implementation will have a good impact on practice. The implementation of EBP has been widely practiced using various strategies. The purpose of this integrative review is to provide an overview of the scientific literature on strategies for implementing EBP in hospitals with barriers obtained during the implementation of EBP in nursing practice in hospitals

METHOD

There have been many studies on the effects of EBP implementation. This study will only focus on the implementation strategies of EBP implementation carried out by nurses in hospitals. Specifically, it will only examine about:

- 1) How is the EBP Implementation Strategy in Nursing Practice?
- 2) What are the barriers to the implementation of EBP in nursing practice?
 - a. Searching Strategy

To enhance the accuracy of this study, Whittemore and Knaf's integrative review method (Whittemore & Knaf, 2005) of Cooper (Cooper, 1989) was used. An integrative review allows the synthesis of diverse research designs, thus providing a comprehensive understanding of a phenomenon. To ensure the accuracy of the article search, the PRISMA 2020 guidelines (Yao et al., 2022) were followed in conducting the review. Literature searches were conducted in 6 online databases in December 2023. The five international databases such as Scopus, Pubmed, ScienceDirect, Proquest, and Ebsco used the keywords "implementation strategy", "application strategy", "implementing", "Implementation", "Evidence-based practice", "EBP", "Nurse", and "Nursing". Meanwhile, the Garuda database uses the keywords "Implementation", "Evidence-based practice", "Nurse". Garuda is an Indonesian database recommended by the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia.

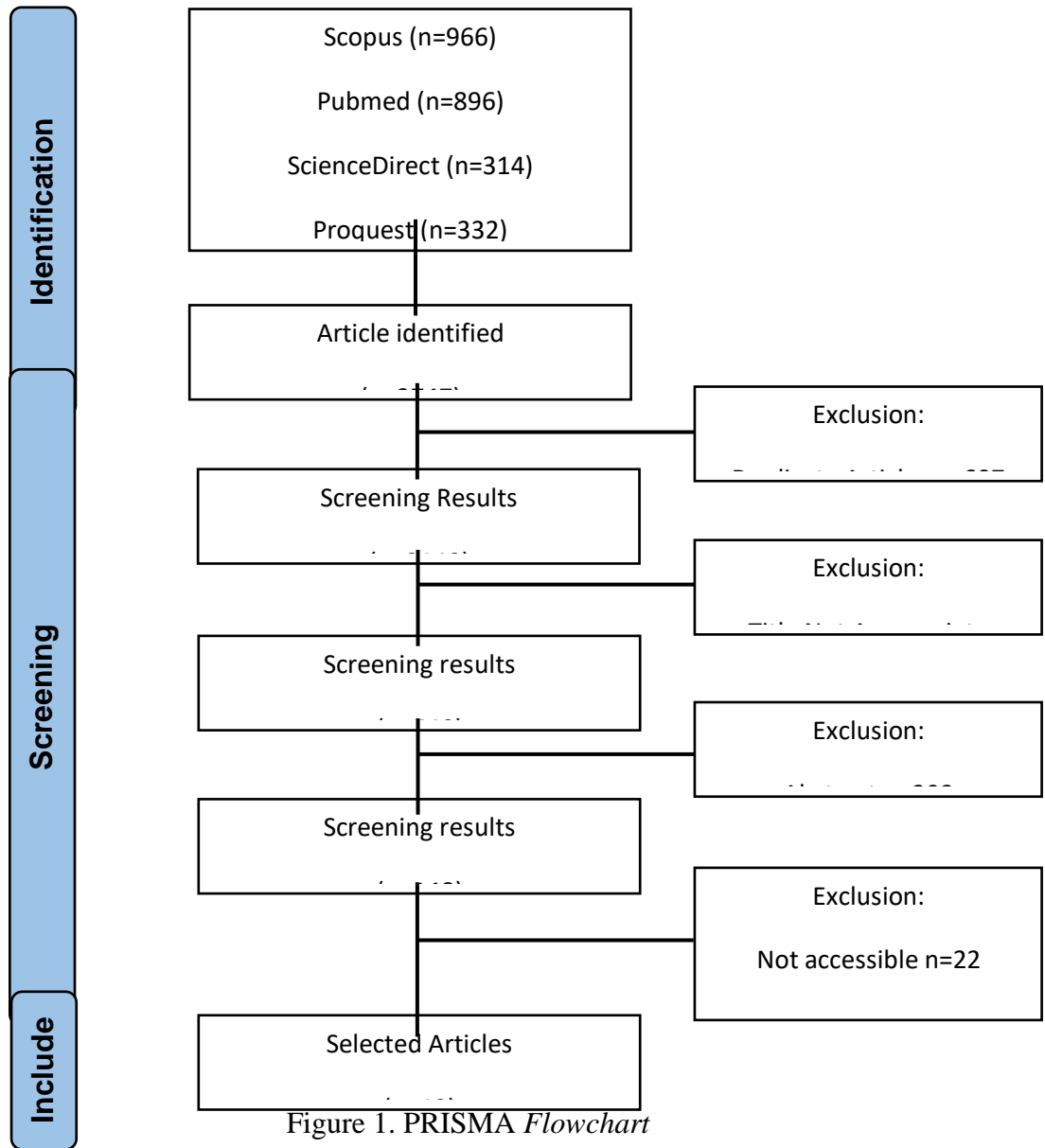


Figure 1. PRISMA Flowchart

The inclusion criteria in this study are: 1) articles in English or Indonesian, 2) published in the last 10 years (between 2014-2023), 3) research focused on the application of EBP, and 4) research conducted in hospitals. As for the exclusion criteria, namely: 1) Review studies, 2) Unpublished research.

Data Extraction and Assessment

The initial data search began by entering keywords into six databases to obtain articles. Once found and identified, the articles were sorted to avoid duplication. Articles were then screened based on their title. Articles with suitable titles were then screened for their abstracts. Articles with suitable abstracts were screened for *full text* according to the inclusion and exclusion criteria. Articles that have passed the screening stage will undergo an integrative review process. In an integrative review, quality evaluation is not a requirement. However, conducting an assessment can support

the interpretation of study results. Two authors assessed the articles found to determine their eligibility for inclusion and interpretation in the integrative review. The 12 selected articles were then critically appraised for quality using an instrument created by Bowling. The ratings were entered into a table for evaluation and interpretation with a 'Yes', 'Not reported', and 'Poor' scale. The results of this evaluation were used to assess the quality of the selected articles (Bowling, 2014). This quality evaluation approach was chosen for its relevance in assessing both quantitative and qualitative studies. Based on the evaluation, six studies were deemed high quality, and six received an average quality rating. Finally, it was decided that the selected articles were of sufficient quality to be included in the review (Table 1). After the quality evaluation, data analysis was conducted in several stages: first, data were reduced by grouping, extracting, simplifying, and organizing them into a framework that was analyzed sequentially (Table 2). Then, data were compared and re-examined to reveal patterns, themes, or correlations. Similar data were regrouped and matched with each other. The final stage of data analysis involved verifying data sources to ensure their accuracy, before concluding.

Table 1.
Article Quality Appraisal

Authors	Goals clearly explained	Study design explained	Appropriate research method	Adequate description, sample and exclusion criteria	Ethics presented	Results are reported clearly	The results are in accordance with the study questions and literature	Limitations are presented	Implications discussed	Value/level
(Jia et al., 2016)	Yes	Yes	Yes	Poor	No.	Yes	Yes	Yes	Yes	7/9 Average
(Zhe, 2016)	Yes	Yes	Yes	Yes	No.	Yes	Yes	Yes	Yes	8/9 High
(F. D. O. M. Maia et al., 2018)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9/9 High
(McCarty et al., 2018)	Yes	Yes	No.	No.	Yes	Yes	Yes	Yes	Yes	7/9 Average
(Ren et al., 2019)	Yes	Yes	Yes	No.	No.	Yes	Yes	Yes	Yes	7/9 Average
(Pagnard & Sarver, 2019)	Yes	Yes	Yes	Poor	Yes	Yes	Yes	Yes	Yes	8/9 High
(Pathania et al., 2019)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9/9 High
(Roney et al., 2020)	Yes	Yes	Yes	No.	Yes	Yes	Yes	Poor	Yes	7/9 Average
(Wang et al., 2020)	Yes	Yes	Yes	Poor	Yes	Yes	Yes	Yes	Yes	8/9 High
(Cody et al., 2021)	No.	Yes	Yes	Poor	No.	Yes	Yes	Yes	Yes	6/9 Average
(Yang et al., 2023)	Yes	Yes	Yes	No.	Yes	Yes	Yes	Yes	Yes	7/9 Average
(Albertini et al., 2023)	Yes	Yes	No.	Yes	Yes	Yes	Yes	Yes	Yes	9/9 High

Table 2.
Data Extraction

Author (Year)	Country	Title	Destination	Method/Instrument	Sample	Results	Barriers
(Jia et al., 2016)	China	Management of non-adherence to fluid intake restrictions in hemodialysis patients in a tertiary hospital: a best practice implementation project	Contribution to the implementation of EBP practices in fluid intake in hemodialysis patients.	The EBP implementation was divided into 3 phases that were implemented from June 15 to September 20, 2015. This research uses JBI-PACES and JBI GRIP. Phase 1: Team Building and Initial Data Audit. The researcher did the following: <ul style="list-style-type: none"> - Topic Identification - Create an audit team - Creating Audit Criteria - Initial Data Audit Phase 2: Design and Implementation of strategies to improve practice. Implementation takes place over six weeks. The team discusses barriers to implementation. Phase 3: Follow up post-implementation audit. Post-implementation audits are conducted using the same methods as pre-implementation audits.	The samples in this study were: 20 nurses 30 patients 30 caregivers	The implementation of EBP resulted in a significant improvement in fluid restriction management. Hemodialysis patients' compliance with fluid intake increased, improving the quality of care.	Barriers to the implementation of this EBP: <ol style="list-style-type: none"> 1. Nurses do not have strategies in fluid intake management 2. Hemodialysis patients lack knowledge and skills in fluid intake management 3. Hemodialysis patients lack the motivation and skills to monitor fluid intake independently 4. The role not yet aware of their role in assisting the patient with fluid restriction 5. Hemodialysis patients' psychological status was not evaluated. Depression is a contributing factor to non-compliance with fluid intake restrictions. 6. The increased workload of hemodialysis nurses.
(Zhe, 2016)	China	The assessment and management of constipation	Implementing practices in the assessment and	The EBP implementation was carried out through 3 phases from June to September 2015.	The sample in this study were patients who were admitted to palliative care and had	Outcomes of this EBP implementation include: <ol style="list-style-type: none"> 1. There was an increase 	The barriers to the implementation of this EBP are : <ol style="list-style-type: none"> 1. No valid measurement tool is available to assess constipation in

		n among patients with advanced cancer in a palliative care ward in China: a best practice implementation project.	management of constipation in patients with cancer in palliative care.	The researcher used JBI-PACES and JBI-GRIP. Phase 1: Baseline Audit and Design Audit. In this phase, five team members were selected for the implementation. The tasks were topic audit, criteria audit, setting and sampling, questionnaire design, and conducting the baseline audit. Phase 2: Implementation. Phase 2 was conducted from July 6 to August 23, 2015. The Literature study disbursement results summarized barriers to implementation. Phase 3: Post Implementation. This phase was conducted on August 24 - September 27, 2015. The audit used the same criteria as the baseline audit.	been diagnosed with recurrent cancer that had metastasized. There were 30 patients involved in the baseline audit and another 30 patients in the post-audit.	in nurses' knowledge of constipation assessment and management. There are measurement tools used for constipation assessment for integrating constipation assessment with hospital information systems.	advanced cancer patients in the palliative care setting. 2. Lack of nurse skills in conducting physical examinations of patients 3. Lack of knowledge of nurses in preventing and managing constipation. 4. Patient and caregiver knowledge about constipation is lacking 5. There is no report form on constipation 6. The doctor did not consider laxative administration at the time of opioid administration. 7. It increased the nurse's workload.
(F. D. O. M. Maia et al., 2018)	Brazil	Falls prevention strategies for adult inpatients in a university hospital of São Paulo, Brazil: A best practice implementation project	This EBP aims to identify and improve multidisciplinary collaboration in preventing falls in the internal	The implementation of this EBP is divided into 3 phases. Researchers used JBI PACES and JBI GRIP as tools for audit and feedback. Phase 1: In this phase, the team is formed, a baseline audit is conducted based on existing evidence, and the audit criteria are established.	The samples in this EBP implementation are patients and nurses. During the baseline audit period, the sample consisted of 72 internal ICU patients. At the follow-up audit, the sample consisted of 48	The results showed that identifying barriers and implementing EBP strategies effectively reduced the incidence of falls. This was followed by the standardization of instruments and nurses' work processes,	Obstacles in this implementation include: 1. There is no fall risk assessment form when admitted to the hospital. 2. No standardized criteria for fall risk reassessment 3. There is no valid standardized instrument for assessing fall risk. 4. Nurses lack up-to-date information on Fall Risk Prevention

			ward and ICU.		internal patients and 18 ICU patients. The nurses consisted of 49 nurses in the internal ward and 46 nurses in the ICU during the baseline and follow-up audits.	which was successful in increasing knowledge about fall risk.	5. Lack of information on the risk of falls in the family 6. No updated intervention targets for patient risk factors.
(McCartney et al., 2018)	USA	Implementation of the MEDFRA T to Promote Quality Care and Decrease Falls in Community Hospital Emergency Rooms.	This EBP aimed to select and implement a fall risk assessment for use in health system-integrated emergency rooms in Northern Minnesota, Wisconsin, and North Dakota.	This EBP implementation uses the Iowa Model of Evidence-Based Practice to Promote Quality Care. This model was chosen because it places evidence in the context of organization, priorities, and processes. It is used on a large scale and in an extensive healthcare system. The first step in implementing this model was to identify barriers. The new MEDRAFT instrument was chosen to replace the old instrument. It is simple to use, with only 6 question items related to the factors of falls in the emergency room. The next step is monitoring, analyzing structure, process and outcome.	The sample for this application was 12 emergency rooms in 3 states.	The results of this EBP implementation need to be revised regarding the instruments used. This is related to input from nurse users of the instrument.	The barrier to implementing EBP is that it is only implemented in one health system.
(Ren et al., 2019)	China	Assessment and management of pain during	The purpose of this EBP application	The implementation of this implementation uses 3 phases. Researchers use JBI	The sample for this EBP implementation was 50 patients	The result of this application is:	The barriers found in the implementation of this EBP include:

		dressing on is to change in impleme nt how to with assess and manage a best practice during addressing changes for DFU patients.	PACES and JBI GRIP. Phase 1: Team building and Baseline Audit. In this phase, team building and baseline audits were conducted. The team members formed were people who had already participated in the JBI PACES and JBI GRIP training. Phase 2: Strategy design and implementation. At this stage, the researcher searched for and collected assessment instruments for pain in patients with DFU. Researchers also developed strategic plans to achieve the objectives by holding workshops.	with DFU and 15 nurses.	1. Availability of appropriate assessment instruments (VAS and C-PAINAD) that have been integrated into the wound assessment sheet. 2. A pamphlet was provided to the patient. This pamphlet contains information about the pain during the dressing process and non-pharmacological pain management.	1. Unavailability of standardized assessment instruments during wound dressing changes. 3. Unavailability of educational materials for patients 4. Unavailability of facilities to increase knowledge related to pain assessment and management for nurses 5. There is still limited knowledge of pain assessment among new nurses 6. New nurses' low competency in pharmacological therapy in managing pain. 7. Patients experience concerns regarding the side effects of therapy. 8. Families need to learn how to participate in patient pain management during dressing changes.	
(Pagnard & Sarver, 2019)	USA	Family Visitation in the PACU: An Evidence-Based Practice Project	To create a new policy regarding family visits in the PACU room. This may result in increased satisfaction and decreased anxiety of family members.	The researcher conducted a literature review on factors that influence changes in rules regarding family visits in PACU. The application of EBP is divided into Pre-Intervention, Intervention, and Post Intervention. Pre-Intervention. At this stage, the nurse conducted a survey and asked the sample to write down their feedback regarding the policy. Family members were also given a	The sample for this EBP implementation was 29 nurses and 80 family members of patients divided into 20 in the preintervention period and 20 each in the three months after the intervention.	The results of the implementation of this EBP are: 1. There is a decrease in anxiety in the patient and family members 2. Patient and family member satisfaction has increased since the implementation of family visitation rules in PACU.	Barriers found in the implementation include: 1. Nurses' concerns about patient privacy 2. May interfere with patient care 3. Nurse anxiety about patient care 4. Lack of education for families 5. Increased exposure to infection 6. Lack of clarity of guidelines.

				questionnaire on satisfaction.			3. Patient satisfaction increased over three months post-intervention.
				Intervention. The family visitation policy in the PACU room was implemented at this stage.			
				Post-Intervention. Family members were asked to complete a satisfaction survey on the policy for three months at this stage.			
				*The article does not describe the implementation method used.			
(Pathani et al., 2019)	USA	Music Therapy and Pain Management in Patients with End-Stage Liver Disease: An Evidence-Based Practice Quality Improvement Project.	This application aims to determine the feasibility of providing music therapy to reduce pain and increase satisfaction of liver patients.	The method of implementing this EBP is using the PDCA method. Four nurses were trained to provide music interventions the patients chose, lasting 30 minutes per intervention for 3 days. Patients were also trained to use an iPad as a tool to follow the therapy. The intervention is divided into 3 phases. Pre-Intervention, Intervention, and Post-Intervention. At pre-intervention, the patient's pain was measured using the NPRS instrument 15 minutes before therapy. If any analgesic was used, it was recorded in	The sample in the application of EBP is eight patients and four nurses.	The research results are as follows:	Barriers to EBP implementation were evaluated continuously for six weeks and interventions were formulated immediately.
						1. Pain scores based on NPRS before intervention ranged from 4-7 with an average pain score of 6.	
						2. Post-intervention pain scores ranged from 3 to 6, averaging 5.	
						3. The intervention showed a decrease in pain scores.	
						4. 25% of patients did not need additional analgesics 2 hours after therapy.	
						5. Patient satisfaction	

			the monitoring sheet.			increased by 30%	
			At the intervention stage, music therapy was given for 30 minutes. If any analgesic was used in this stage, it was recorded in the monitoring sheet.			6. Nurses have a choice of non-pharmacologic interventions related to pain reduction.	
			After 30 minutes of therapy, the patient entered Post-Intervention by re-measuring pain with the NPRS.			7. The intervention's feasibility can be considered in inpatient rooms with many patients.	
			Patients are then measured for satisfaction.			This is because patients are free to choose their therapeutic music.	
			All actions were recorded in the monitoring sheet.				
(Roney et al., 2020)	USA	Implementing a MEWS-Sepsis screening tool: Transformational outcomes of a nurse-led evidence-based practice project.	This EBP implementation aims to evaluate, revise, implement, and measure the impact of the MEWS-Sepsis instrument and improve early detection and management of sepsis.	The method used in implementing this EBP is the PDSA Cycle. Nurses conducted a systematic literature search on the components of the MEWS Instrument. The instrument was then created and measured for reliability, use, feasibility, and acceptance by nurses. A critical scenario of a sepsis patient was also created and tested in a hospital simulation laboratory. The PDSA cycle is used for minor improvements.	The sample for implementing the MEWS instrument was 139 nurses who volunteered to participate.	As a result of the implementation of the EBP, there has been a downward trend in sepsis-related mortality since the implementation of the MEWS instrument. Nurses thought the MEWS instrument could be incorporated into their assessment sheets to assess patients' risk of sepsis. After the testing, the MEWS-Sepsis tool was rolled	*Barriers not explicitly mentioned in the article In its application, it is necessary to make adjustments to the standard values of the instrument.

				The instrument was piloted in July 2014 with prior training for nurses in June 2014.		out to 11 hospitals.	
(Wang et al., 2020)	China	Prechemot herapy nursing assessment among adult cancer patients in a university cancer center in Shanghai, China: a best practice implementation project.	This EBP implementation aims to see the implementation of pre-chemotherapy assessment in adult cancer patients.	This EBP implementation uses JBI PACES and JBI GRIP. The implementation lasted for six months from May to October 2018. This implementation consists of 3 phases. Phase 1: Plan and conduct the baseline audit. In this phase, the audit criteria are established. Phase 2: Strategizing and putting research into practice. In this phase, the author developed three criteria for barriers by setting strategies for achieving each. Phase 3: Follow-up post-implementation audit. This section conducts a post-implementation audit with the same audit criteria as the baseline audit.	This EBP implementation involved 36 nurses.	This EBP implementation results in the availability of a patient prechemotherapy assessment sheet. Although in the future, it is necessary to test the validity and reliability of the instrument	Barriers encountered during the implementation of the EBP include: <ol style="list-style-type: none"> 1. Lack of nurse knowledge related to pre-chemotherapy assessment 2. No integrated chemotherapy assessment form 3. Unavailability of related rules 4. Lack of time for assessment before chemotherapy.
(Cody et al., 2021)	Australia	Improving the quality of delirium practices in a large Australian tertiary hospital: An evidence implementation	Delirium is a serious common condition. Sometimes, it is misdiagnosed. This EBP implements	This EBP implementation uses JBI PACES and JBI GRIP. The implementation consists of 3 phases. Phase 1: Baseline audit and establishment of audit criteria. In this phase, the audit criteria were	The samples in this EBP implementation were 143 patients and 172 nurses in Phase 1. 151 patients in Phase 3.	Follow-up audit results to 151 patients showed significant improvement. There are analyst obstacles.	Barriers that exist in the implementation of this EBP include: <ol style="list-style-type: none"> 1. The implementation of EBP for nine months was insufficient. 2. The sample used is relatively small.

	tion initiative	ntation aims to implement the Australian Delirium Clinical Standards of Care.	established. Data was collected from 143 patients from several wards. 172 nurses completed the survey. Phase 2: This phase establishes strategies for overcoming the barriers. Phase 3: Follow-up audit. Conducted on 151 patients			
(Yang et al., 2023)	China Parental involvement in postoperative pain management among children in a urology ward: A best practice implementation project	Postoperative pain has adverse effects on children with urologic problems. It can lead to disturbed sleep patterns, bleeding, and delayed recovery. This EBP implementation aims to increase parental participation in pediatric pain management.	This implementation uses the Fudan University Evidence-Based Nursing Center's Evidence-Based Continuous Quality Improvement mode (EBCQIM FUENC). This framework has four stages: searching for research evidence, reviewing status, introducing evidence, and evaluating effects. This implementation consists of 3 phases. Phase 1: Baseline Audit. In this phase, the work team was organized. Literature disbursement related to audit criteria was conducted. Identified the sample and inclusion and exclusion criteria. Conducting the baseline audit. Phase 2: Design and Implementation of research evidence. The team	The sample for this EBP implementation was 211 parents and 16 nurses in the baseline audit phase. In the follow-up phase, there were 202 parents and 16 nurses.	The indicators of parental assessment showed a significant increase after the intervention, with perfect scores. The application of EBP is considered effective in getting parents involved in pain management in children.	The barriers that exist in the implementation of this EBP are : 1. Short implementation time 2. There may be a Hawthorne effect that can produce bias. 3. Parents are less involved in the postoperative pain management process 4. Nurses have a different understanding of pain management 5. No parental guidelines for participation in postoperative pain management in children

				interviewed parents, identified barriers to implementation, and strategized solutions.			
				Phase 3: Follow-up audit. Follow-up is conducted using the same methodology as during the baseline audit phase.			
(Alberti ni et al., 2023)	Brazil	Person-centered care approach to EBP prevention and management of falls among adults and the aged in a Brazilian hospital: a best practice implementation project	The purpose of this EBP implementation is to assess the suitability of the person-centered care approach for preventing and managing falls in adults and the elderly in the medical-surgical and oncology wards.	The frameworks used are JBI PACES and JBI GRIP. There are 3 phases in implementing this EBP. Phase 1: Team formation and baseline audit. In addition to determining the audit criteria, this phase also determines the sample and measurement method. Phase 2: Strategy design and implementation. Phase 3: Follow-up audit and Post Implementation	At the baseline audit, this EBP implementation included 31 oncology room patients and 18 surgical medical room patients. In the follow-up audit phase, there were 27 oncology room samples and 16 surgical medical room patient samples. In the baseline audit phase, 24 nurses from the oncology room and 11 nurses from the medical-surgical room were involved in implementing this EBP. In the follow-up audit phase, 23 nurses from the oncology room and 11 nurses from the medical-surgical room were involved.	Some criteria have a positive influence on the implementation of this EBP. Some criteria still need to be improved. Patients should be involved in fall risk assessment.	Barriers that occur include: 1. Lack of technological resource support in conducting bedside fall risk assessment.

RESULTS AND DISCUSSION

Twelve articles were thoroughly examined and carefully synthesized to reach conclusions from the research on EBP implementation strategies and barriers encountered in EBP implementation. The studies were spread across different countries: USA (n=4), Brazil (n=2), Australia (n=1), and China (n=5).

EBP Implementation

Of the 12 articles analyzed, all implemented EBP with a problem-solving focus. The basis for implementing EBP is the problems encountered in nursing services. Implementing EBP can be used to create and test instruments that help in the service. In addition, the implementation of EBP can be used to develop a good therapy model for patients. Implementing a well-structured EBP can solve the problems that occur in nursing services. Nurses must be able to implement EBP in nursing practice.

Framework

The use of frameworks in implementing EBP serves as a guide. The analysis results show that 7 articles use JBI PACES, 1 article uses the Iowa Model, and 1 article uses EBCQIM FUENC. The analysis also found that 3 articles did not use a framework. 2 articles use the PDSA/PDCA cycle, and 1 article does not use a framework but has a clear implementation cycle. This can certainly affect the implementation of EBP.

Barriers

All articles identified barriers to the EBP implementation process. Broadly speaking, the most common barriers encountered were the unavailability of assessment instruments, lack of knowledge of nurses and patients sampled in the implementation process, increased workload of nurses, and insufficient time estimation. Well-identified barriers will support changes in the implementation of EBP.

EBP Implementation Strategy

Implementation of EBP is carried out to overcome problems in nursing services. The implementation of EBP can be implemented in the form of improved care management carried out by Jia et al., (2016) and Wang et al. (2020). Another article implemented EBP to test the use of instruments that assist in nursing practice conducted by Zhe (2016), Maia et al.(2018), McCarty et al.(2018), Ren et al. (2019), Roney et al. (2020), Wang et al.(2020), and Cody et al.(2021). Implementation of EBP in practice and in-service interventions can also be done. Articles that use EBP implementation in nursing practice are Pathania et al.(2019), Yang et al.(2023), and Albertini et al.(2023). In the implementation of EBP, it can also be used to determine the effect of a policy, as Pagnard and Sarver (2019) have done. Therefore, nurses can carry out EBP implementation not only limited to problems in problems related to the interventions provided.

Implementation Framework

The use of this framework affects the EBP implementation strategy. Most articles that use JBI PACES have three stages or phases in implementing EBP. By using this JBI PACES framework, implementers can create their success criteria that can be assessed for change. In addition, with the use of JBI PACES, EBP implementers are also asked to identify potential barriers that will occur during implementation. These barriers were intervened using strategies based on the research

results. In the final phase, the implementation process is audited using the criteria set at the beginning. In addition to these frameworks, some articles apply the Iowa Model and EBCQIM FUENC. The stages compiled also have 3 stages. Using a framework that can serve as a guide and feedback regarding the successful implementation of EBP is important.

Obstacles and Problem-solving Strategies

Implementing EBP using a suitable framework provides an opportunity to analyze barriers and develop improvement strategies. Barriers are addressed using strategies based on relevant research evidence. Barriers found after EBP implementation need further intervention.

CONCLUSION

Of course, problems related to nursing services will occur. Proper EBP implementation can solve this problem and improve implementation results. EBP implementation, accompanied by a clear selection of frameworks, also affects the implementation process and results. Nurses must be able to implement EBP in nursing service problems.

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