

Association between Evidence Based Practice Sustainability and Perceived Nurses' Obstacles at Pediatric Critical Care Departments

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Abstract

Background: Researchers, practitioners, and policy makers in the field of health care are increasingly focusing on evidence-based practice. It has gained power as a strategy that can affect nursing professionals' knowledge and practice. **Aim of the study:** To determine the association between evidence based practice sustainability and perceived nurses' obstacles at pediatric critical departments. **The study's design:** A descriptive design was used in this study. **The sample** is a convenience sample of 114 nurses affiliated at pediatric critically departments (NICU, PICU) in Assuit university children hospital. **Tools:** Three tools were utilized in the present study. **Tool (1):** Socio-demographic data of pediatric nurses & nurses' knowledge regarding EBP, **Tool (2):** Nurses' practice regarding EBP & nurses' attitude towards EBP and **Tool (3):** Perceived nurses' obstacles regarding EBP. **Results:** Approximately two-thirds (70.2%) of the studied nurses had satisfactory knowledge, practice, and attitudes relating EBP, and (64.9%) of nurses perceive obstacles to implement EBP. **Conclusion:** There is a considerable negative association between perceived obstacles and nurses' knowledge, practice, and attitude towards EBP. **Recommendations:** Courses emphasizing evidence-based practice were offered. Theoretical knowledge and practical skills should be included in these programs to guarantee that nurses stay current with developments in nursing practice based on evidence

Keywords: Evidence Based Practice, Nurses' Obstacles & Pediatric Critical Departments.

Introduction

Evidence-based practice (EBP) is the delivery of complete, high-quality care based on the most recent research and knowledge, as opposed to traditional procedures, peer advice, or personal convictions. It promotes improvement in student education, more practical research, and improve collaboration among academics and clinicians (Naghibi et al., 2021). It also enables more personalized, efficient, dynamic, and efficient nursing care, as well as the optimal use of clinical judgement. Nursing care maintains up with the most recent technological improvements and benefits from new knowledge innovations when evidence is utilized to determine best practices rather than to preserve current techniques (Halawa et al., 2020).

Giving clinicians the necessary skills to make wise clinical decisions, break bad habits, and enhance clinical performance has been the aim of EBP. With an increasing number of nurses participating in clinical decision-making, there is an increasing demand for sound and efficient judgments that use the best available evidence to improve practice (Dobber et al., 2023). EBP is critical to ensuring the quality of nursing care. Individual patients are a specific

component of the EBP idea. However, the term evidence-based practice (EBP) refers not just to the process of making decisions for individual patients, but also to the development of policies and standards for patient or carer groups (Melnyk & Fineout-Overholt, 2022).

Despite the significance of EBP in modern nursing, two fundamental concerns underlying the EBP movement remain unclear. The first question is what counts "something" as proof and the second is which of two contradicting pieces of evidence is more persuasive when presented to practitioners. Some authors believe that the fundamental pieces of evidence include clinical competence, research findings, patient preferences, policy reports, and benchmarking data (Loversidge & Zurmehly, 2023). Five essential phases are involved in implementing evidence-based nursing interventions, which act as recommendations for decisions on patient care. This method integrates the patient's values and expectations with clinical expertise and the best available outside evidence (Perry et al., 2021). Asking precise questions about the patient's issue and establishing a goal-like coming up with a solution for their particular condition-are the first steps in the

process. The next step is to compile the best available evidence by looking up pertinent clinical literature from reputable sources. In order to ascertain whether the information is reliable, superior to other pieces of evidence currently in existence, and beneficial to the patient, the third phase involves reviewing the resources that were gathered. Applying the data to clinical practice and making judgement based on nursing skills and new information constitutes the fourth phase. The fifth and last step is to assess the results to determine whether the treatment was successful and should be continued for other patients (Ranegger et al., 2022).

Research findings can be gathered, assessed, and applied by nurses to enhance their clinical practice experience and expertise. In an EBP setting, nurses must apply credible evidence to specific client situations while exercising clinical judgement and considering client values and system resources. Because of their limited experiential knowledge and clinical judgement, they may struggle to reconcile client values with evidence and professional assessment (Dos Santos et al., 2022).

Study the association between EBP sustainability and perceived obstacles among nurses in pediatric critical care departments is important to identify challenges that may hinder the consistent application of EBP protocols, leading to interventions that support nurses in making informed decisions. Addressing these obstacles can enhance the quality of care provided to pediatric patients in critical care settings. Understanding the factors influencing EBP sustainability can help healthcare institutions allocate resources effectively, optimize training programs, and foster a culture that values evidence-based care practices. This research has the potential to improve patient outcomes, enhance professional development opportunities, contribute to organizational performance, and inform evidence-based policy-making in pediatric critical care settings (Chekerwa, 2023).

The study's significance:

Pediatric nurses in critical care units can improve patient outcomes and care quality while also feeling more fulfilled in their roles by implementing EBP (Weiner, 2023). It is expected that a small fraction of nurses and other healthcare professionals will consistently use this type of clinical practice role to develop practice settings that allow nurses to be integrated into the context. Recognizing this difficult adjustment and providing appropriate support for nurses is critical and cost-effective (Dos Santos et al., 2022).

Evidence-based practice in nursing is essential to maintaining the relevance and currency of healthcare procedures. Additionally, it closes the theory-practice

divide and offers patients innovative care. It provides nurses and patients with a host of additional advantages. Improves patient outcomes, lowers medical costs by preventing issues, advances nursing science, permits the use of contemporary technology in the provision of healthcare, gives nurses more autonomy and self-assurance in their decision-making, and makes sure that cutting-edge therapies and care practices keep nursing practice up to date (Tappen, 2022). As a result, the study was conducted to determine association between evidence-based practice sustainability and perceived nurse obstacles in pediatric critical care departments.

The aim of study:

The study aimed to determine association between evidence based practice sustainability and perceived nurses' obstacles at pediatric critical care departments through:

1. Assess nurse's knowledge related to evidence based practice.
2. Assess nurses' practice related to evidence-based practice.
3. Determine nurses' attitude related to evidence based practice.
4. Identify perceived nurses' obstacles related to evidence based practice.
5. Determine the relationship between evidence based practice sustainability and nurse's obstacles at pediatric critical care departments.

Research Question

1. What is the nurse's knowledge related to evidence-based practice?
2. What is the nurse's practice related to evidence-based practice?
3. What is a nurse's attitude related to evidence-based practice?
4. What are the barriers nurses face related to evidence-based practice?
5. What is the association between evidence-based practice sustainability and perceived obstacles among nurses in pediatric critical care departments?

Subjects and Method

Research design:

This study utilized a descriptive research design.

Subjects:

In this study, a number of 114 nurses were selected from Assiut university children hospital at pediatric critical care departments (NICU, PICU) using a convenient sampling approach.

The Setting:

The study was conducted at Assiut university children hospital at pediatric critical care departments which included two setting (neonatal intensive care unit and pediatric intensive care unit).

Tool for data collection:

Data were collected using three tools:

Tool (1): The structural interview questionnaire was developed by the researcher. It had three parts:

Part (1): Socio- demographic data on pediatric nurses includes information such as age, gender, academic qualification, years of experience, and previous training in evidence-based nursing.

Part (2): nurses' knowledge related EBP.

It was developed by the researchers after reviewing literature and tool adopted from (Alqahtani et al., 2020). The tool consisted of 22 true and false questions including evidence-based practice, identifying its value, determining its processes, constructing a PICO question, and doing a computerized literature search.

The questionnaire's scoring system was as follows: the answer that was correctly received a score of "ONE," whereas the incorrect response received a score of "ZERO." Knowledge levels were classified as satisfactory ($\geq 75\%$) or unsatisfactory ($< 75\%$) (Ruzafa-Martinez et al., 2020).

Tool 2:

Part (1): Nurses' reported practice related EBP. It was developed by (Koota et al., 2021). It has fourteen Items. It addressed exchanging data with peers, assessing one's practice results, framing precise questions, identifying pertinent evidence, analyzing literature critically, assessing a quantitative research project, and so forth.

Scoring system

The developed reported practice of EBP had two possible scores in the scoring system: "done" got a rating of "ONE," and "not done" obtained a "ZERO." Based on the grading system utilized, the reported practice level was classified as either satisfactory (75%) or bad if less than (75%) (Koota et al., 2021).

Part (2): Nurses' attitudes towards EBP.

It was developed by Aarons (2004). It contained fifteen items, among them I am willing to try new therapies and interventions even if I have to adhere to a treatment manual because I am more knowledgeable about how to care for my clients than academic researchers are. I am also open to using novel and distinct therapies and interventions that have been developed through research, even though research-based therapies and interventions are not clinically useful and clinical experience is more significant than using annualized therapies and interventions.

Scoring system:

A higher score implies a more positive outlook on evidence-based practice. The items in the evidence-based practice attitude scale scoring system were assessed using a visual rating scale ranging from one to four. Stronger agreement represents (1), agreeing

represents (2), disagreeing represents (3), and strongly disagreeing indicates 4. Each question on the attitudes sub scale had two pairs of contrasting statements, one positive and the other negative. These statements were used to ask respondents to rank their feelings on EBP. If a response had a score greater than two, it was considered positive.

Tool (3): Perceived pediatric nurses' obstacles scale related to EBP.

It was adopted from Mahmoud & Abd elrasol. (2019). There were five possible answers on the Likert scale: strongly agree, agree, unsure, disagree, and disagree strongly.

The thirteen sections created up the scale: eight sections allocated with time constraints; two sections allocated with financial resources; nine sections allocated with infrastructure deficiencies; seven sections allocated with organizational support; and one section allocated with the limitations of evidence-based interventions. The sixth part contained five obstacles related to poor access to evidence-based information; the seventh included seven obstacles linked to personal characteristics; the eighth part consisted of fifteen obstacles related to the need for skills and training; and the ninth part contained twelve obstacles related to the need for education; the tenth part included nineteen obstacles linked to the inappropriate orientation of research; the eleventh part contained eight obstacles related to communication difficulties; the twelfth part involved five obstacles linked to language obstacles; and the thirteenth consisted of seven obstacles allied to failure of implementation.

Scoring system

The evidence-based practice obstacles scale was designed with a visual rating system with five possible scores for each issue. severely agreeing is represented by the number (1), agreeing by the number (2), disagreeing by the number (4), and severely disagreeing by the number (5). A higher score indicates a more significant EBP obstacle. Every item in the barriers sub-scale comprised two sets of contradictory statements, each consisting of a high and a low statement. These sentences were used to ask the respondents to rate their EBP- related obstacles. If a response had a score higher than three, it was considered high.

Methods

The study was approved by the Dean of the Faculty of Nursing at Assiut University and received authorization from the Director of Hospitals to proceed. After obtaining official permission from the director of hospitals, the investigator filled out an interview questionnaire for every nurse. In a room that was especially prepared, the pediatric critical nurses were interviewed. Each nurse's interview form

was completed by the investigator. Data was gathered five days a week from beginning April 2024 until the end of June 2024.

Validity:

In order to establish the content validity of the form, a group of five professional three pediatric nursing professors, two community health nursing professors evaluated the tool's thoroughness and appropriateness. The content validity index, which quantifies the degree to which the tool accurately represents the intended material, were found to be 88% for tool I, 91% for tool II and 87% for tool III.

Reliability

The tool's reliability were evaluated using Cronbach's Alpha test, resulting in a coefficient of 0.82 for tool I, 0.79 for tool II and 0.83 for tool III.

Pilot study:

Eleven pediatric nurses from neonatal and pediatric critical care units participated in a pilot study to evaluate the efficiency of the data collection method, the completeness of the response sets, the usefulness of the instructions, and the time needed to complete the questionnaire. Questions on the questionnaire's suitability and applicability were posed to pilot participants. Every question had been addressed, thus nothing more needed to be clarified. It took 30 minutes for the nurses involved in the pilot trial to finish the questionnaire. The pilot participants were

asked questions. Every question had been addressed, thus nothing more needed to be clarified.

Ethical considerations

Official approval for the proposed study's conduct was given by the Scientific Research Ethics Committee with code 1120240764. The study and the participants' role were fully explained to the subjects prior to their giving their informed consent. It was completely voluntary for subjects to decline to participate in the study. Participants had to be given the option to withdraw at any time, and the study's nature and goals had to be made very clear. Additionally, the material needed to be kept confidential so that no one else could access it without the participants' consent. They were all matters of ethics. Respect was shown to morals, values, culture, and beliefs. The goal of the study was communicated to every pediatric nurse employed in the previously described environment.

Statistical Analysis

The raw data from the current investigation were coded. The data was analyzed and interpreted using SPSS version 20. Statistical measures employed contained the Pearson correlation coefficient, mean, standard deviation, frequency, and distribution.

Result:

Table (1): Socio- demographic characteristics of studied nurse (n=114)

Items	N	%
Age (Years)		
< 20	6	5.3
20 – <30	80	70.2
30 or More	28	24.6
Gender		
Male	8	7.0
Female	106	93.0
Academic qualification		
Diploma degree	20	17.5
Institute degree	20	17.5
Bachelor degree	61	53.5
Post graduate	13	11.4
Experience (Years)		
Less than 5	75	65.8
5 – 10	25	21.9
More than 10	14	12.3
Attending previous training about evidence-based practice		
Yes	100	87.7
No	14	12.3



Figure (1): Total knowledge of EBP among studied nurses (n= 114)

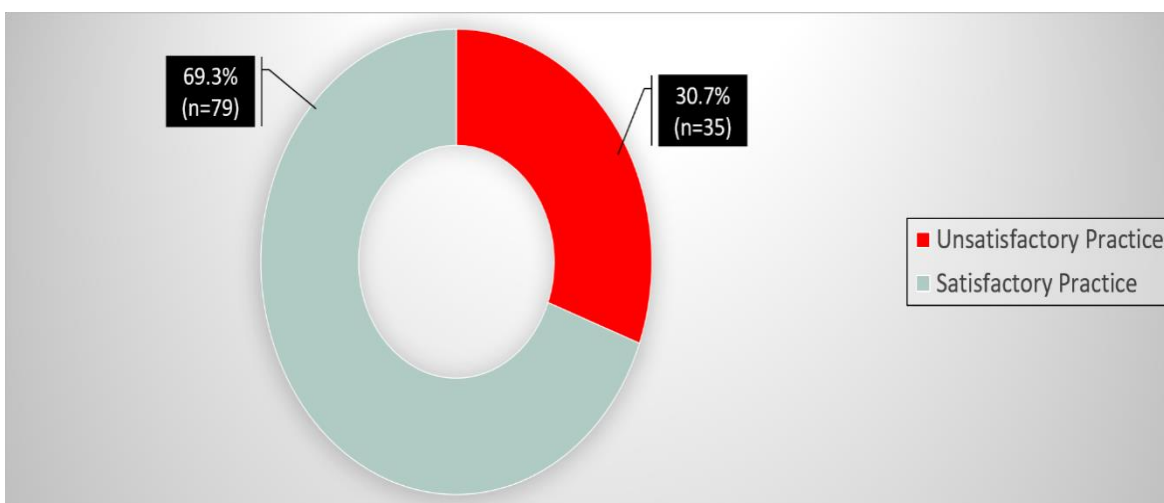


Figure (2): The studied nurses' total practice regarding EBP (n= 114)

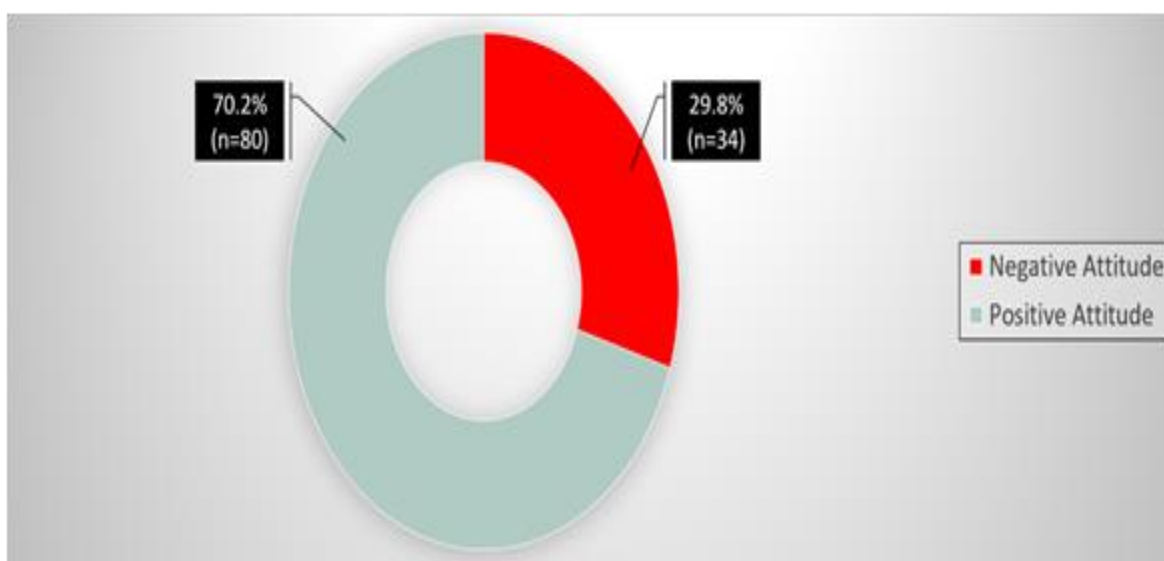


Figure (3): The studied nurses' total attitude regarding EBP (n= 114)

Table (2): Number and distribution of obstacles faced by pediatric nurses in implementation EBP (n=114)

Perceived Pediatric Nurses' Obstacles	Negative response		Positive response		Mean ±SD
	n	%	n	%	
Obstacles of time.	45	39.5	69	60.5	28.7 ±3.4
Obstacles due to insufficient financial resources.	55	48.2	59	51.8	7.0 ±1.8
Obstacles to infrastructure development..	94	82.5	20	17.5	24.8 ±6.1
Obstacles to organizational support	91	79.8	23	20.2	12.6 ±6.0
Obstacles based on evidence are limited.	96	84.2	18	15.8	2.1 ±1.0
Obstacle to accessing evidence-based information.	100	87.7	14	12.3	14.3 ±2.3
Obstacles regarding professional characteristics.	85	74.6	29	25.4	23.0 ±4.0
Obstacles to skill and training development.	98	86.0	16	14.0	39.9 ±8.7
Obstacles of the necessity for educational hurdles	79	69.3	35	30.7	9.0 ±2.2
Obstacles related to inadequate orientation of research	57	50.0	57	50.0	29.1 ±4.0
Obstacles to conducting research.	21	18.4	93	81.6	71.2 ±6.0
Communication obstacles.	87	76.3	27	23.7	24.0 ±5.5
Obstacles to implement EBP	65	57.0	49	43.0	23.5 ±5.7

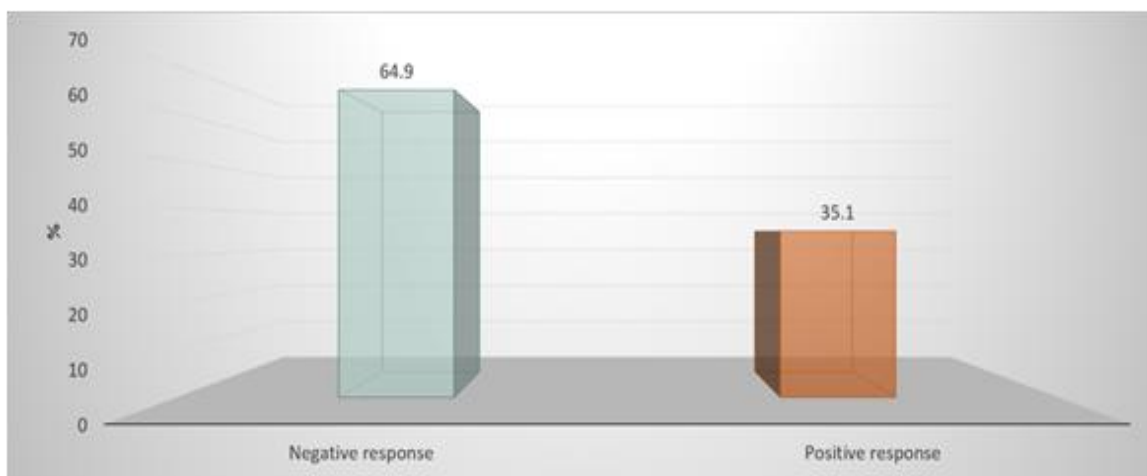


Figure (4): The total perceived pediatric nurses' obstacles to implement EBP (n=114)

Table (3): Correlation between perceived pediatric nurses' obstacles with their knowledge, practice and attitude related to EBP (n=114)

Items	Perceived Pediatric Nurses' obstacles	
	r	p
Nurses' knowledge related to EBP	- 0.660	<0.001**
Nurses' practice related to EBP	- 0.888	<0.001**
Nurses' attitude related to EBP	- 0.708	<0.001**

Table (1): Depicts the nurses' socioeconomic characteristics that are being studied. More than two-thirds of nurses (70.2%) are between the ages of 20 and 30 years. The majority of studied sample is female (93.0%) of all participants. Furthermore, the academic degrees of the nurses are distributed among levels. More than half (53.5%) held a bachelor's degree, followed by diploma and institute degrees (17.5%), with a lesser proportion of nurses holding a post-graduate degree (11.4%).The data reveals that

65.8% of the participants have less than five years of experience. Additionally, it was found that 87.7% of nurses have received training in evidence-based practice this given by training staff in hospital.

Figure (1): Depicts the distribution of the study nurses' total knowledge of EBP. It depicts the percentage of nurses divided into two categories: those with inadequate knowledge and those with adequate knowledge. It was found that more than one-third (37.7%) of them had inadequate knowledge

about EBP. On the contrary hand, nearly two-thirds (62.3%) of nurses had adequate knowledge regarding EBP.

Figure (2): Displays the distribution of total EBP practice among the studied nurses. It has been noticed that 30.7% of the nurses in the study have been classified as having unsatisfactory practice regarding EBP. Conversely, two third (69.3%) of the sample, have been categorized as having satisfactory practice regarding EBP.

Figure (3): Presents the distribution of the studied nurses' total attitude regarding EBP. According to the figure, (29.8%) of the nurses had unsatisfactory attitude towards EBP. On the other hand, more than two third of the nurses (70.2%) had a satisfactory attitude towards EBP.

Table (2): Presents distribution and number of the perceived pediatric nurses' obstacles to implement EBP. The table reveals interesting insights about the perceived obstacles faced by pediatric nurses to implement EBP. The domain of obstacles related to lack of time shows that (39.5%) of nurses responded negatively, indicating that they perceive time constraints as a significant obstacle. However, (60.5%) of nurses responded positively, suggesting that a majority of nurses do not perceive time as a major hindrance. In the domain of obstacles related to lack of financial resources, (48.2%) of nurses responded negatively. Obstacles related to lack of infrastructure and organizational support are perceived by a significant number of nurses. About (82.5%) of nurses view lack of infrastructure as an obstacle, while (79.8%) perceive a lack of organizational support. The domain of obstacles related to limitations of evidence base, a significant majority of nurses perceive the lack of research culture, improper research orientation, and restricted access to the evidence base as obstacles. A large proportion of nurses (86.0%) perceive a need for skills/training, while (69.3%) perceive a need for education. In the domain of communication difficulties, (76.3%) of nurses perceive it as an obstacle, while (57.0%) perceive failure to implement EBP.

Figure (4): Distribution of the total perceived pediatric nurses' obstacles to implement EBP among studied nurses. It was prominent that (64.9%) of the nurses in the study had negative response. Conversely, one third (35.1%) of the them had positive response

Table (3): Reveals the correlation between perceived pediatric nurses' obstacles and their knowledge, practice, and attitude related to EBP. There is a strong negative correlation between the perceived obstacles and nurses' knowledge, practice, and attitude related to EBP (- 0.660, - 0.888, - 0.708) respectively.

Discussion

Healthcare policymakers, workers, researchers, and regulatory bodies recognize EBP as the gold standard for safe and compassionate care. Addressing such impediments is crucial for the long-term survival of EBP in pediatric critical care departments. According to **Aburuz et al. (2017)**, healthcare organizations should foster an environment that encourages and facilitates the implementation of EBPs. This study aimed to examine the association between EBP sustainability and perceived nurse obstacles in pediatric critical care departments.

The current study found that around two-thirds of the nurses had sufficient knowledge of EBP. On the other hand, more than one-third of nurses had insufficient knowledge of EBP. It emphasizes the need for initiatives and measures to close the knowledge gap and foster a better awareness of EBP among this subset of nurses. It could be attributed to various factors such as inadequate educational opportunities, limited access to training programs, or a lack of emphasis on EBP in the nursing curriculum. This study's findings contradicted **Kaseka & Mbakaya (2022)** who claim that nurses lacked knowledge about EBP and **Melnyk et al., (2004)**, who researched (Nurses' Perceived Knowledge, Beliefs, Skills, and Needs Regarding Evidence-Based Practice: Implications for Accelerating the Paradigm Shift), which found that the majority of nurses had an inadequate level of knowledge about EBP.

The study's findings also found that less than one-third of the nurses in the study had poor EBP practices. It could be attributed to several factors such as a lack of awareness or comprehension of EBP, restricted access to research material, time restrictions, or a reluctance to change. In contrast, two-thirds of the sample reported excellent EBP practice.

It appears that a sizable proportion of nurses are successfully integrating EBP into their usual clinical practice. This study's findings contradicted those of **Koota et al. (2021)**, who conducted a study on the effects of EBP education on emergency nurses' EBP attitudes, knowledge, self-efficacy, skills, and behavior: A randomized controlled trial revealed that self-directed EBP education did not influence emergency nurses' EBP competence.

According to the current study, 29.8% of nurses reported an unsatisfactory attitude towards EBP. It implies that there may be a subset of nurses who are hesitant, skeptical, or unmotivated to apply EBP. On the other hand, more than two-thirds of nurses expressed satisfaction with EBP. It appears that the majority of the nurses in the study recognize the value of EBP and are willing to incorporate it into their practice. This study finding was in disagreement with

Kaseka & Mbakaya's (2022) cross-sectional survey of registered nurse-midwives in Malawi's key hospitals revealed negative attitudes towards EBP.

Regarding the perceived obstacles to EBP implementation among pediatric nurses. It was discovered 39.5% of nurses cited a lack of time as an important obstacle to implementing EBP. This suggests that a sizable proportion of nurses believe they have limited time available to engage in evidence-based activities. However, the majority of nurses did not see time as a significant obstacle. It also indicates that a considerable percentage of nurses can devote enough time to EBP activities, which is encouraging for the integration of evidence-based care. These findings contradict **Barends et al. (2017)**, who discovered that a lack of time and a low comprehension of scientific research are important hurdles to managers' adoption and implementation of EBP.

Furthermore, the study demonstrated that impediments connected to a lack of financial resources had a very even distribution. This suggests that some nurses may be concerned about financial restrictions, while others are not. A large number of nurses see a lack of infrastructure and organizational support as impediments. This emphasizes the need to have a supportive organizational environment in which nurses can engage in evidence-based activities. Addressing these concerns can help EBP placement go more smoothly and improve overall care quality.

This finding aligns with **Crawford et al. (2023)**, **Hosseini-Moghaddam et al. (2023)** and **Mahmoud & Abdelrasol's (2019)** study, "Obstacles in Applying Evidence-based Procedures by Nurses in Their Clinical Settings: A Descriptive Study," which found that a lack of financial resources hindered EBP implementation.

A significant majority of nurses consider limits in the evidence base, insufficient access to the evidence base, incorrect research orientation, and a lack of research culture as obstacles. This reflects a need for improving the availability and accessibility of evidence, promoting research literacy among nurses, and fostering a culture that values and supports research and evidence-based care. These results were supported by **Booth., (2011) & Hadgu et al., (2015)**

According to the recent study, a large majority of nurses perceiving a need for skills/training, education and communication difficulties suggests a recognition of the importance of enhancing knowledge and competencies in EBP. This highlights the need for professional development opportunities and educational initiatives that focus on building skills in critical appraisal, research utilization, and evidence-based decision-making. Addressing these obstacles

requires strategies to improve communication channels, promote knowledge translation, and facilitate the implementation of evidence-based interventions. This result go on line with **Ammouri et al., (2014)** and **Wafa'a et al., (2023)**

Finally, the current study found a considerable negative correlation between perceived obstacles and nurses' knowledge, practice, and attitude toward EBP. In the researcher point of view, when nurses perceive significant obstacles hindering their engagement with EBP, it can negatively impact their knowledge, practice, and attitude towards EBP. So it is important for healthcare organizations and stakeholders to address these perceived obstacles by providing adequate resources, support, and opportunities for education and training. By creating a supportive culture, improving access to evidence, promoting effective communication and collaboration, and addressing time constraints, nurses' knowledge, practice, and attitude related to EBP can be positively influenced, leading to improved patient outcomes and enhanced quality of care.

Conclusion

The study concluded that nearly two-thirds of nurses had satisfactory knowledge, practice, and attitude toward EBP. One-third of the nurses polled gave favorable replies to perceived obstacles to using EBP. There was a significant negative correlation between perceived obstacles and nurses' knowledge, practice, and attitude towards EBP.

Recommendations:

Based on the study's findings, several suggestions are offered for enhancing implementing EBPs in pediatric critical care units.

1. Policies and procedures for NICUs and PICUs should include evidence-based recommendations. Pediatric critical care nurses should have easy access to these recommendations so they may be used in their everyday work.
2. It is important to regularly evaluate nurses' abilities and knowledge, particularly about EBP. This can help pinpoint regions in need of development and direct focused educational initiatives.
3. Courses emphasizing EBP were offered. Theoretical knowledge and practical skills should be included in these courses to guarantee that nurses stay current with developments in evidence-based nursing.
4. Encourage collaboration among pediatricians, critical care nurses, and other medical specialists who work with children. By using multidisciplinary approach, it is possible to improve communication, exchange best practices,

and jointly reduce the risk associated with the profession.

5. Hospitals and NICUs must to put in place ongoing quality improvement programs, periodically examine and enhance pediatric critical care methods. Frontline healthcare providers should provide feedback on these initiatives to ensure their feasibility and usefulness.
6. Create mentoring programs in the NICU to connect seasoned nurses with less experienced staff members. Pediatric critical nurses can benefit from this mentoring by receiving continuing support, guidance, and practical insights that will further their professional growth.

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Conflicts of Interest: The authors declare no conflicts of interest.

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