



KNOWLEDGE, ATTITUDE AND PRACTICE OF EVIDENCE-BASED NURSING AMONG NURSES IN CHILDREN'S WARD AT TERTIARY HEALTH INSTITUTIONS IN ANAMBRA STATE, NIGERIA

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ABSTRACT: *Background:* Evidence-based nursing care is the cornerstone of quality healthcare which integrates the best available research evidence with clinical expertise and patient values to guide nursing practice. Despite the importance of evidence-based nursing care, many nurses in children's wards lack the necessary knowledge and skills to implement this approach effectively. This has created a gap in practice of EBP in pediatric care which resulted in consequences, such as reduced patient outcomes, increased mortality rates, increased length of hospital stays, and requesting for discharge against medical advice due to longer hospital stay, among others. *Aim:* The study assessed the knowledge, attitude and practice of evidence-based nursing care and associated factors among nurses in children's wards at tertiary health institutions in Anambra State. *Materials and Methods:* A descriptive cross-sectional survey design was adopted for the study. Population of the study was 127 and a total population survey was used. The instrument for data collection was a self-structured questionnaire, data obtained were analyzed using Microsoft Excel, descriptive statistics, inferential statistics for hypothesis testing and IBM statistical package for Social Sciences (SPSS) version 29. *Results:* The results indicated that the majority of the nurses 105 (82.7%) had a good knowledge of evidence-based practice, 68 (53.5%) of the nurses possessed a negative attitude towards evidence-based practice, and 89 (70.1%) of the nurses had a poor practice of evidence-based nursing. However, several factors, such as lack of time, lack of resources, lack of knowledge about EBP, lack of access to research literature/guidelines, organizational challenges, workload and staffing constraints, among others were associated with the practice of evidenced-based nursing. *Conclusion:* Majority had a good knowledge, their attitude was negative and several factors were associated with it leading to poor practice of evidence-based nursing. It is recommended that for continuous improvement of knowledge and attitude, educational training opportunities, access to reliable research databases and mentorship programs are needed.

KEYWORDS: Knowledge, Attitude, Practice, Evidence-based nursing, Nurses, Nursing care, Tertiary health institutions.



INTRODUCTION

A global challenge facing providers and healthcare organizations today is the inability to provide evidence-based, cost-effective, and quality care that improves practices and patient outcomes (Glasziou et al., 2017). Evidence-based practice (EBP) has been a priority in many countries for many years. It was stated that it is important for the providers of medical care worldwide to be of high quality and emphasized that health and social services should be based on solid scientific evidence (World Health Organization (WHO), 2023).

However, nurses represent a large group of medical professionals who provide health care to clients in many areas of healthcare and require extensive scientific evidence to support their actions (Shaman et al., 2019). For this reason, nurses are supposed to offer high quality nursing services rooted on scientific proof and this can only be achieved with evidence-based practices (World Health Organization (WHO), 2023). This has therefore made evidence-based practice a challenge for 21st century nursing (Melnik et al., 2018).

The American Association of Nurses (AAN) (2023) states that evidence-based practice in nursing provides comprehensive, high-quality care based on the latest research and information, as opposed to traditional methods, peer recommendations, or personal opinions. Nurses can increase their awareness as well as advancement in medical skills by collecting, analyzing and applying research results. The patient is at the center of nursing and evidence-based practices emphasize this. According to Al-Busied et al. (2019), evidence-based nursing care is a way of solving problems by providing research oriented clinical services, clinical knowledge, and patient preferences and values. One of the key goals of EBP through the practice of best practices is to standardize clinical procedures and patient care (Stevens, 2016). According to the Institute of Medicine (USA), EBP is essential for enhancing the efficacy and security of patient treatment (Al-Busied et al., 2019). Furthermore, it affirms that EBP is a crucial skill that all healthcare practitioners need to possess.

The benefit of EBP is that it makes it easier to provide patients with high-quality, secure care. EBP is a concept that has been used to describe a systematic method of enhancing clinical decision-making and healthcare that is based on the most recent research evidence at the time. Nurses frequently rely on tradition or intuitive processes as the rationale for treatments, despite the fact that basing practice on research and evidence requires communicating and accepting the information (Fisher et al., 2016). One result is that nursing interventions may be determined by what the nurse has already learned via formal education and practical experience; as a result, practice variations were observed that are illogical (Hammer et al., 2023).

The most recent research data that should be considered when making clinical decisions is known as "evidence-based practice." It can be used as a decision-making framework that takes into account both the nurses' personal beliefs and the patient's standards in order to solve developing clinical challenges. It might be put to use to propose remedies to fresh clinical issues as they appear in the real world (Melnik et al., 2018). EBP has become more well-known in the nursing field as a result of how it has affected nurses' knowledge and practice. As a result, EBP is becoming increasingly recognized as a crucial element of raising the standard of patient care as well as healthcare and nursing services. It is therefore commonly regarded as a crucial element of high-quality healthcare, especially in the United States, Africa, and Nigeria. Focused and systemic efforts are being made to integrate EBP



into all patient encounters in all clinical settings. Many strategies have been used to promote EBP among healthcare professionals, with varying degrees of success in increasing knowledge of EBP and changing attitudes toward EBP. These strategies include journal clubs, mentoring programs, and research training.

Nurses' knowledge of EBP plays a fundamental role in its practice. A study conducted by Okoronkwo et al. (2019) found that nurses in Anambra State generally had a moderate level of knowledge regarding EBP. However, there were significant gaps in understanding specific aspects of EBP, such as searching for and critically appraising evidence. This lack of knowledge can hinder the practice of EBP, as nurses may struggle to identify and utilize the top obtainable facts to update their practice.

Also, the attitude of nurses towards EBP greatly influences its practice. A positive attitude is essential for nurses to embrace and adopt EBP in their daily practice. According to a study by Oyediran and Oyediran (2020), nurses exhibited a generally positive attitude towards EBP. They recognized the importance of EBP in improving patient outcomes and expressed willingness to engage in EBP activities. However, some nurses expressed concerns about the time constraints and workload associated with implementing EBP, which may hinder its full integration into practice.

Furthermore, effective practice of EBP requires a multifaceted approach that addresses various factors influencing its adoption. One crucial factor is the availability of resources and support systems. Adequate access to research evidence, training programs, and mentorship opportunities can enhance nurses' confidence and competence in implementing EBP (Adejumo et al., 2020). However, a study by Onyeka et al. (2018) revealed that nurses in Anambra State faced challenges in accessing relevant research evidence and lacked institutional support for EBP practice. These challenges need to be addressed to facilitate successful integration of EBP into nursing practice.

Another factor influencing EBP practice is organizational culture. A fantastic organizational way of life that values and supports EBP promotes its adoption among nurses. In contrast, a negative culture can impede the practice process. A study by Eze et al. (2019) highlighted the need for a supportive organizational culture that encourages nurses to engage in EBP activities. This includes fostering a culture of inquiry, providing opportunities for shared decision-making, and recognizing and rewarding EBP initiatives.

Moreover, individual factors such as nurses' self-efficacy and motivation also influence the practice of EBP. Nurses who perceive themselves as competent and confident in research based expertise perform better in scientific-driven nursing careers (Okoronkwo et al., 2019). However, a lack of self-efficacy and motivation can hinder nurses' willingness to implement EBP. Therefore, interventions aimed at enhancing nurses' self-efficacy and motivation towards EBP are crucial for successful practice.

According to the American Nurses Association (2023), there are several examples of evidence-based practices in childcare, such as correct placement of a nasogastric in children, intramuscular injections in infants, young children and young children, managing pain and symptoms in children at the end of life, reduction of minor procedure-related pain in newborns, measuring children's blood pressure using a non-invasive means, infection control, nutrition support and psychological support. Patients' overall health outcomes should



improve if nurses in Anambra State's tertiary health institutions' that work in children's wards close the knowledge gap, change their attitude, and apply evidence-based nursing practices to the procedures they perform in the children's ward.

MATERIALS AND METHODS

A descriptive cross sectional survey design was adopted for the study. The area of the study was all the tertiary health institutions in Anambra State. Population of the study was 127 and a total population survey was used. The instrument for data collection was a self structured questionnaire comprising five sections (A, B, C, D and E); to validate the instrument, both face and content validity was done by three experts in the field of nursing and public health, and their contributions and corrections were implemented. The test-retest methods were used to test for reliability on respondents from University of Nigeria Teaching Hospital Enugu which were not part of the study population but have similar characteristics with the study population. The data was computed in IBM SPSS and internal consistency was analyzed using Cronbach Alpha which yielded 0.72. Ethical considerations were duly observed, as data collection lasted for 8 weeks. The data obtained were analyzed using Microsoft Excel, descriptive statistics and IBM Statistical Package for Social Sciences (SPSS) version 29.

RESULTS

Table 1: Socio-demographic characteristics of the respondents

Variables	Frequency (n=127)	Percentage %
Age		
20-29	19	15.0
30-39	58	45.7
40-49	42	33.1
50 and above	8	6.3
Gender		
Female	118	92.9
Male	9	7.1
Education		
Bachelor's Degree	62	48.8
Phd in Nursing	1	0.8
Master's Degree in Nursing	10	7.9
Registered Nurse/Registered midwifery	54	42.5
Years of experience		
1-5	37	29.1
6-10	40	31.5
11-15	32	25.2
16-20	15	11.8
21-25	3	2.4
Current position/title in the children's ward		
Assistant Director of Nursing	5	3.9
Chief Nursing Officer	13	10.2



Nursing Officer 1	40	31.5
Principal Nursing Officer	34	26.8
Senior Nursing Officer	35	27.6

Table 1 above showed the respondents demographic data which indicated that (19) 15% of the respondents fall within the age range of 20-29, followed by the range of 30-39 which was 58 (45.7%), 42 (31.1%) were within the age range of 40-49 while 8 (6.3%) was the last age range which was 50 and above.

The table also presented the gender which showed that 118(92.9%) were females while 9 (7.1%) were males. It further indicated their levels of education which showed that 62(48.8%) had bachelor's degree, 1(0.8%) had doctorate degree, 10 (7.9%) had masters degree and 54(42.5%) had registered Nurse and Registered Midwife certificates.

The table further showed their years of experiences as follows: 37 (29.1) were within 1-5 years range, 40 (31.5%) within the range of 6-10, 32 (25.2%) fall within the range of 11-15, 15(11.8%) were within the range of 16-20 and 3 (2.4%) were within the range of 21-25. The nurses' current position/titles were shown as follows: 5 (5.9%) were Assistant Director of Nursing, 13 (10.2) were Chief Nursing Officer, 40 (31.5%) were Nursing Officer 1, 34 (26.8%) were Principal Nursing officer and 35 (27.6%) were Senior Nursing Officer.

Table 2: Occupational history of the respondents

Variables	Frequency (n=127)	Percentage %
Have you previously worked in any other healthcare settings before the tertiary facility you are working currently		
No	18	14.12
Yes	109	85.8
Have you previously worked in any other ward/department before this children's ward where you are working currently		
No	20	15.7
Yes	107	84.3
Any additional certifications or specializations in pediatric nursing		
No	126	99.2
Yes	1	0.8
If yes, mention		
Diploma in pediatrics	1	100.00

Table 2 above showed the occupational history of the respondents. The table showed the number of nurses currently working in children's wards at tertiary health institutions in Anambra state. 57 (44.9%) of nurses ranging from 1-10 currently work in children's wards followed by 65 (51.2%) ranging from 11-20 and 5 (3.9%) ranging from 41 and above. Moreso, the table indicated whether the nurses have previously worked in any other healthcare settings before the facility they are working in now. The responses showed that



18(11.12) have not worked in any other health institution before the present one while 109 (85.8%) have worked in another institution before this present one. 126 (99.2%) had no additional certificate while 1(0.8%) had a diploma in pediatrics.

Table 3a: Knowledge of nurses in children's ward towards evidence-based practice

Variables	Frequency (n=127)	Percentage %
How would you rate your overall knowledge on evidence-based nursing practice		
Average knowledge level	73	57.5
High knowledge level	43	33.9
Low knowledge level	11	8.6
Are you familiar with the concept of evidence-based practice (EBP) in nursing		
No	14	11.0
Yes	113	89.0
If 'yes' what was your source of information (n=113)		
Academic courses and training	33	29.2
Clinical guidelines or protocols	13	11.5
In-service training at your healthcare	13	11.5
Mentorship from experienced nurses	5	4.4
Online resources or websites	5	4.4
Other healthcare professionals	1	0.9
Peer-reviewed research articles and journals	14	12.2
Professional conferences or seminars	29	25.7
Have you received any formal education or training on evidence-based practice (EBP) in nursing		
No	47	37.0
Yes	80	63.0

Table 3a above indicated that the majority of the nurses 73 (57.5%) had fair level knowledge of evidence-based practice, 43 (33.9%) of the nurses had high level knowledge of evidence-based practice while 11 (8.6%) of the nurses had poor level knowledge of evidence-based practice. Again 14 (11%) of the nurses were not familiar with the concept of evidence-based practice while 110 (89.0%) were familiar with the concept of evidence-based nursing practice.

Furthermore, 33 (11.0%) of the nurses' source of information was through academic courses and training, 13 (11.5%) of the nurses' source of information was through clinical guidelines or protocols, 13(11.5%) of the nurses source of information was in-service training at their health care, 5 (4.4%) of the nurses' source of information was through mentorship from experienced nurses, 5(4.4%) of the nurses got their information from online resources or webs, 1 (0.9%) got their information through other healthcare professionals, 14(12.2%) got their information through peer reviewed research articles and journals and 29 (25.7%) received their information through professional conferences or seminars.



Table 3b: Knowledge of nurses in children's ward towards evidence-based practice (contd)

Variables	Frequency (n=127)	Percentage %
Extremely confident	9	7.1
Moderately confident	75	59.1
Not at all confident	1	0.8
Slightly confident	11	8.6
Very confident	31	24.4
How often do you consult research evidence when making decisions about patient care in the children's ward		
Always	26	20.5
Frequently	23	18.1
Never	8	6.3
Occasionally	59	46.5
Rarely	11	8.6
How confident are you in your ability to effectively communicate and collaborate with other healthcare professionals in implementing evidence-based practice (EBP) in the children's ward		
Extremely confident	9	7.1
Moderately confident	46	36.2
Not at all confident	5	3.9
Slightly confident	10	7.9
Very confident	57	44.9
Do you think evidence-based practice (EBP) is for improving patients' outcomes in the children's ward		
No	6	4.7
Not sure	15	11.8
Yes	106	83.5

Table 3b above indicated that 9(7.1%) of the nurse always, 75 (59.1%) frequently, 1 (0.8%) rarely, 11 (8.6%) were slightly confident and 31 (24.4) were very confident respectively in their ability to search for and critically appraise research evidence related to nursing care in the children's ward.

Also on how they consult research evidence when making decisions about patient care in children's ward, it showed that 26 (20.5%) of the nurses always, 23 (18.1%) frequently, 8 (6.3%), never, 59 (46.5%) occasionally and 11 (8.6) rarely respectively consulted research evidence when making decisions in children's ward.

Again, the table showed that 9(7.1%) of the nurses were extremely confident, 46 (36.2%) of the nurses were moderately confident ,5 (3.9%) of the nurses were not all confident, 10 (7.9%) of the nurses were slightly confident and 57 (44.9%) of the nurses were very



confident in their ability to effectively communicate and collaborate with other healthcare professionals in implementing evidence-based practice.

Finally, 6(4.7%) of the respondents answered that evidence-based nursing is not for improving patients outcome in children's ward, 15 (11.8%) of the nurses were not sure if evidence-based practice helps in improving patients outcome in children's ward and 106 (83,5%) of the nurses were of the opinion that evidence-based practice is for improving patients outcome in the children's ward.

Table 4: Summary of the level of knowledge of nurses in children's wards at tertiary health institutions in Anambra State towards evidence-based practice

Variables	Frequency (n=127)	Percentage %
Poor knowledge	12	9.4
Fair knowledge	10	7.9
Good knowledge	105	82.7
Total	127	100.0

/0- 44 poor knowledge, 45-59 fair knowledge, 60-100 good knowledge /

Table 4 above indicated that the majority of the nurses 105(82.7%) had good knowledge of evidence-based practices (EBP), 12 (9.4%) of nurses had poor knowledge of EBP and 10 (7.9%) of nurses had fair knowledge of EBP. Majority of the nurses had good knowledge of evidence-based practice and their sources of information ranges from academic courses and training, clinical guidelines or protocols, in-service training at the healthcare, mentorship from experienced nurses, online resources, other health care professionals, professional conferences, and seminars, among others.

Table 5a: Attitude of nurses in children's ward towards evidence-based practice

Variables	Frequency (n=127)	Percentage %
On a scale of 1-10, how would you rate your overall attitude towards evidence-based practice (EBP) in the children's ward		
1-5	18	14.2
6-10	109	85.8
How often do you use research findings or evidence to guide your nursing practice in the children's ward		
Always	7	5.5
Frequently	33	26.0
Never	1	0.8
Occasionally	41	32.3
Rarely	5	3.9
Sometimes	40	31.5
What are some challenges or challenges you face when trying to implement evidence-based practice in the children's ward (n=361)		
Concerns about the applicability of research to pediatric care	22	6.1
Difficulty in understanding and interpreting research	22	6.1
Insufficient access to research resources	48	13.3



Lack of awareness about available evidence	42	11.6
Insufficient of time	38	10.5
Insufficient education and training in EBP	54	15.0
Limited support from the organization	50	13.9
Resistance from colleagues or superiors	43	11.9
Resource constraints	42	11.6

Table 5a revealed what the overall attitude of nurses in children's wards were as follows: 18(14.2%) failed on the scale of 1-5 while 109 (85.8) failed on the scale of 6-10. Again, 7 (5.5%) of nurses always used research findings or evidence guide in their nursing care in the children's ward, 33(26.0) of nurses frequently used it, 1 (0.8) of nurses never used it, 41 (32.3%) occasionally used it, 5 (3.9%) of nurses rarely used it and 40 (31.5%) of the nurse sometimes used the research findings or evidence to guide their nursing practice in children's ward. Furthermore, 22 (6.1%) of the nurses had concerns about the applicability of research in pediatric care, 22 (6.1%) of nurses had difficulty in understanding and interpreting research, 48(13.3%) of nurses had insufficient access to research resources, 42 (11.6%) of nurses lack awareness about available evidence, 38(10.5%) of nurses lack time, 54 (15.0) of nurses lack training and education in EBP, 50 (13.9%) of nurses have limited support from the organization, 43 (11.9%) of nurses met resistance from colleagues or superiors, and 42 (11.6%) of nurses experienced resource constraints.

Table 5b: Attitude of nurses in children's ward towards evidence-based practice (contd).

Variables	Frequency (n=127)	Percentage %
Are the management or leadership in the tertiary hospital supportive towards implementing evidence-based practice		
Not Supportive	9	7.1
Partially Supportive	56	44.1
Supportive	62	48.8
Have you ever participated in educational sessions related to evidence-based practice (EBP) in nursing		
No	24	18.9
Yes	103	81.1
If 'yes', please describe the nature of the evidence-based practice (EBP) educational session you have attended		
Conferences	15	14.5
Others	1	1.0
Seminars	41	39.8
Workshops	46	44.7
How supportive is the organizational culture in your tertiary health facility towards evidence-based practice (EBP) practice in the children's ward		
Neutral	49	38.6
Supportive	42	33.1
Unsupportive	11	8.6
Very Supportive	23	18.1



Very unsupportive	2	1.6
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Table 5b indicated results of nurses' responses on the following items. 9 (7.1%) of the nurses were not supported, 56 (44.1%) of nurses were partially supported and 62 (48.8%) of nurses were supported respectively by the management or leadership in the tertiary hospital towards implementing evidence-based practice.

Also, 24 (18.9%) of nurses have not participated in educational sessions related to evidence-based practice while 103 (81.1%) of nurses had participated in educational sessions related to evidence-based practice.

Again, 15 (14.5%) of nurses have attended conferences, 1 (1.0%) of nurses had attended other educational sessions, 41(39.8%) of nurses had attended seminars and 46 (44.7%) of nurses had attended workshops, respectively. All were educational sessions tailored towards evidence-based practice.

Finally, the table above indicated how supportive the organizational culture in the tertiary institutions was towards evidence-based practice. 49(38.6%) of the nurses were neutral, 42 (33.1%) of the nurses were supported, 11 (8.6%) of the nurse were not supported, 23 (18.1%) of the nurses were very much supported and finally, 2 (1.6%) of the nurses were very unsupportive.

Table 5c: Attitude of nurses working in children's ward towards evidence-based practice (contd).

Variables	Frequency (n=127)	Percentage %
How often do you engage in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice in the children's ward		
Always	15	11.8
Frequently	22	17.3
Never	4	3.1
Occasionally	36	28.4
Rarely	10	7.9
Sometimes	40	31.5
What resources or tools have you accessed to support evidence-based nursing in the children's ward		
Access to a hospital with research databases	14	6.2
Access to pediatric research journals	28	12.4
Clinical practice guidelines	48	21.3
EBP committees or teams within the facility	22	9.8
EBP mentors or experts within the facility	23	10.2
EBP training programs or workshops	43	19.1
EBP-related software or tools	16	7.1
Online medical literature databases	27	12.0
Others	4	1.8
In what ways do evidence-based practice positively impact patient outcomes in the children's ward (n=270)		



Better clinical outcomes	52	19.3
Enhanced adherence to clinical guidelines	10	3.7
Enhanced Client fulfillment	44	16.3
Enhanced Client protection	37	13.7
Enhanced workers fulfillment	40	14.8
More efficient care delivery	68	25.2
Other	4	1.5
Reduced healthcare costs	15	5.5

Table 5c above showed how often the nurses engaged in discussions or collaborated with other healthcare professionals to incorporate evidence-based practice in the children's ward. 15(11.8%) of the nurses always engaged in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice, 22 (17.3%) of nurses frequently engaged in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice, 4 (3.1%) of nurses never engaged in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice, 36(28.4%) of nurses occasionally engaged in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice, 10 (7.9%) of nurses rarely engaged in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice and 40(31.5%) of nurses sometimes engaged in discussions or collaborate with other healthcare professionals to incorporate evidence-based practice.

Also, the table showed the tools or resources nurses had accessed to support evidence-based practice in the children's ward. 14 (6.2%) of the nurses accessed the tools through hospital research databases, 28 (12.4%) of the nurses accessed the tools through pediatric research journals, 48 (21.3%) of nurses accessed the tools through clinical practice guidelines, 22 (9.8%) of the nurses accessed the tools through EBP committees or teams within the facility, 23 (10.2%) of nurses accessed tools through EBP mentors or experts within the facility, 43 (19.1) of nurses accessed the tools through EBP training programs or workshops, 16 (7.1%) of nurses accessed the tools through EBP-related software or tools, 27 (12.0%) of nurses accessed the tools through online medical literature databases and 4 (1.8%) of nurses accessed the tools through other means.

Furthermore, it indicated the ways evidence-based practice has impacted positively in patients' outcomes in the children's ward. 52 (19.3) nurses were impacted through better clinical outcomes, 10 (3.7%) of nurses were impacted through enhanced adherence to clinical guidelines, 44(16.3%) of the patients were impacted through enhanced patient satisfaction, 37 (13.7%) of nurses were impacted through improved patient safety, 40 (14.8%) of the nurses were impacted through improved staff satisfaction, 68(25.2%) of nurses were impacted through more efficient care delivery, 15(5.5%) of nurses were impacted through reduced healthcare costs and 4 (1.5%) of nurses were impacted through other means.



Table 6: Summary of the attitude of nurses working in children's ward at tertiary health institutions in Anambra State towards evidence-based practice

Variables	Frequency (n=127)	Percentage %
Negative attitude	68	53.5
Positive attitude	59	46.5
Total	127	100.0

/0-59 Positive attitude, 60-100 Negative attitude

Table 6 showed that a good number of nurses 53.5% (68) possessed a negative attitude towards evidence-based practice while 46.5% (59) possessed a positive attitude towards EBP. This result indicated that nurses working in children's wards at tertiary health institutions in Anambra State possessed a negative attitude towards evidence-based practice.

Table 7a: Level of practice of evidence-based nursing among nurses in children's ward

Variables	Frequency (n=127)	Percentage %
What are the evidence-based practice utilized in your daily nursing care in the children's ward (n=396)?		
Early mobility and physical therapy intervention	40	10.1
Hand hygiene and infection control guidelines	71	17.9
Immunization and vaccination protocols	40	10.1
Medication administration best practices	72	18.2
Others	4	1.0
Pain assessment	50	12.6
Pediatric nutrition and feeding guidelines	37	9.3
Pediatric patient assessment standards	45	11.4
Pediatric wound care and management protocols	37	9.3
How often do you consult research literature or evidence-based guidelines when making clinical decisions in the children's ward?		
Always	23	18.1
Never	1	0.8
Occasionally	52	40.9
Often	15	11.8
Rarely	7	5.5
Sometimes	24	18.9
Very often	5	3.9
What kind of support do you receive from your colleagues in implementing evidence-based practice in the children's ward?		
Comprehensive support	22	17.3
Limited Support	37	29.1
Moderate support	32	25.2
No Support	9	7.1
Strong support	27	21.3



Table 7a revealed results on levels of evidence-based practice among nurses. It showed that 40 (10.1%) of nurses early mobility and physical therapy intervention as a form of evidence-based practice, 7(17.9%) of nurses utilized hygiene and infection control guidelines, 40 (10.1%) of nurses utilized Immunization and vaccination protocols, 7 nurses utilized medication administration best practices, 4 (1.0%) of the nurses utilize others, 50 (12.6%) of nurses pain assessment, 37 (9.3%) of nurses utilized pediatric nutrition and feeding guidelines, 45(11.4%) of nurses utilized patient assessment standards and 37 (9.3%) of nurses utilized pediatric wound care and management protocols. Another result revealed how often nurses consulted research or evidence-based guidelines when making clinical decisions in the children's ward. 23 (18.1%) of nurses always consulted research or evidence-based guidelines when making clinical decisions in the children's ward, 1 (0.8%) of nurses never consulted research or evidence-based guidelines when making clinical decisions in the children's ward, 52 (40.9) of nurses occasionally consulted research or evidence-based guidelines when making decisions in the children's ward, 15(11.8%) of nurses often consulted research or evidence-based guidelines when making decisions in the children's ward, 7 (5.5%) of nurses rarely consulted research or evidence-based guidelines when making decisions in the children's ward, 24 (18.9%) of nurses sometimes consulted research or evidence-based guidelines when making clinical decisions in the children's ward and 5 (3.9%) of nurses very often consulted research or evidence-based guidelines when making clinical decisions in the children's ward.

Moreso, 22 (17.3%) of nurses received comprehensive support, 37(29.1%) of nurses received limited support, 27 (21.3%) of nurses received moderate support, 9 (7.1%) of nurses received no support and 27 (21.3%) of nurses received no support respectively from their colleagues in practicing highly effective practice in the children's ward.

Table 7b: Level of practice of evidence-based practice among nurses in children's ward (contd)

Variables	Frequency (n=127)	Percentage %
Lack of knowledge about EBP	46	17.0
Insufficient collaboration from colleagues	46	17.0
Insufficient time	43	15.9
Insufficient resources	50	18.4
Organizational challenges	35	12.9
Others	11	4.0
Resistance to change	40	14.8
What resources or tools have you accessed to support research -based nursing in the children's ward (n=166)		
Clinical practice guidelines	50	30.1
Colleague support and collaboration	15	9.0
EBP resources provided by the institution	18	10.8
EBP training programs	48	28.9
Others	3	1.8
Research literature databases	32	19.3

Table 7b showed that 46(17.0%) nurses encountered lack of knowledge of EBP as a challenge towards the practice of evidence-based practice, 46(17.0%) of nurses encountered lack of support from colleagues, 43 (15.9%) of nurses encountered lack of time, 50 (18.4%) of nurses encountered lack of resources, 35 (12.9%) of nurses encountered organizational



challenges, 11 (4.0%) of nurses encountered other challenges and 40(14.8%) of nurses encountered resistance to change.

Also, the table above showed that 50 (30.1%) of nurses accessed the tools through clinical practice guidelines, 15(9.0%) of nurses accessed the tools through their colleague support and collaboration, 18 (10.8%) of nurses accessed the tools through EBP resources provided by the institution, 48(28.9%) of nurses accessed the tools through EBP resources provided by the institution, 3 (1.8%) of nurses accessed the tools through other means and 32 (19.3%) of nurses accessed the tools through research databases.

Table 8: Summary of the result on the level of practice of evidenced-based practice among nurse in children's ward at tertiary institutions in Anambra State

Variables	Frequency (n=127)	Percentage %
Poor practice	89	70.1
Good practice	38	29.9
Total	127	100.0

/0-59 Good practice, 60-100 Poor practice/

Table 4.1.9 showed that the majority of the nurses 89 (70.1%) had poor practice of evidence-based nursing while a few of them 38(29.9%) had good practice of evidence-based nursing.

Table 9: Factors associated with the practice of evidence-based nursing among nurses

Variables	Likert scale					Mean score	Remark
	Highly influential (5)	Very influential (4)	Moderately influential (3)	Slightly influential (2)	Not at all influential (1)		
Lack of time	21 (16.5)	33 (26.0)	24 (18.9)	23 (18.1)	26 (20.5)	3.0	Accepted
Lack of resources	33 (26.0)	41 (32.3)	27 (21.3)	7 (5.5)	19 (14.9)	3.5	Accepted
Lack of support from colleagues	8 (6.3)	15 (11.8)	39 (30.7)	42 (33.1)	23 (18.1)	2.6	Rejected
Lack of knowledge about EBP	11 (8.7)	61 (48.0)	22 (17.3)	22 (17.3)	11 (8.7)	3.3	Accepted
Lack of access to research literature/guidelines	25 (19.7)	52 (40.9)	20 (15.8)	24 (18.9)	6 (4.7)	3.5	Accepted
Organizational challenges	17 (13.4)	30 (23.6)	38 (29.9)	20 (15.8)	22 (17.3)	3.0	Accepted
Resistance from superiors or management	11 (8.6)	27 (21.3)	23 (18.1)	31 (24.4)	35 (27.6)	2.6	Rejected
Workload and staffing constraints	42 (33.1)	46 (36.2)	20 (15.7)	18 (14.2)	1 (0.8)	3.9	Accepted



Budget limitations	38 (29.9)	26 (20.5)	24 (18.9)	10 (7.9)	29 (22.8)	3.3	Accepted
Patient and family preferences or demands	13 (10.2)	54 (42.5)	16 (12.6)	38 (29.9)	6 (4.7)	3.2	Accepted
Technological challenges	20 (15.7)	48 (37.8)	26 (20.5)	26 (20.5)	7 (5.5)	3.4	Accepted
Cultural or language challenges	15 (11.8)	31 (24.4)	17 (13.4)	49 (38.6)	15 (11.8)	2.9	Rejected
Resistance to change	16 (12.6)	29 (22.8)	37 (29.1)	34 (26.8)	11 (8.7)	3.0	Accepted
Lack of motivation or incentives	21 (16.5)	38 (29.9)	25 (19.7)	18 (14.2)	25 (19.7)	3.1	Accepted
Legal or regulatory constraints	13 (10.2)	17 (13.4)	32 (25.2)	39 (30.7)	26 (20.5)	2.6	Rejected

Table 9 above indicated that several factors were associated with the practice of evidence-based nursing among nurses in children's wards at tertiary health institutions in Anambra State. It has a decision rule which showed that items with mean score of 3 and above were accepted while those with mean score below 3 were rejected. Based on the decision rule, the following factors such as lack of time with mean score of (3.0), lack of resources (3.5), lack of knowledge about EBP (3.3), lack of access to research literature/guidelines (3.5), organizational challenges (3.0), workload and staffing constraints (3.9), budget limitations (3.3), patient and family preferences or demands (3.2), technological challenges (3.4), resistance to change (3.0), lack of motivation or incentives (3.1) were accepted while lack of support from colleagues (2.6), resistance from superiors or management (2.6), cultural or language challenge (2.9) and legal or regulatory constraints (2.6) were rejected. The results concluded that several factors influenced the practice of evidence-based practice in children's wards at tertiary health institutions in Anambra State.

Table 10: Summary of the factors influencing implementation of evidence-based practice among nurses in children's ward at tertiary institutions in Anambra State

Variables	Frequency (n=127)	Percentage %
Low influence	36	28.4
Moderate influence	12	9.4
High influence	79	62.2
Total	127	100.0

/0-44 Low influence, 45-59 Moderate influence, 60-100 High influence/

The above table showed that the majority of the nurses felt that the factors had a high influence 79 (62.2%) towards their practice of evidence-based nursing, while 36 (28.4%) of the nurses felt that the factors had low influence towards their practice of evidence-based nursing. A few of the nurses 12 (9.4%) felt the factors had moderate influence on them toward the practice of evidence-based nursing.



Table 11: Cross tabulation of level of practice against the attitude and knowledge of respondents towards evidence-based nursing

Variables	Level of Practice		X ² -value	p-value
	Good Practice	Poor Practice		
Attitude				
Negative attitude	26 (68.4)	42 (47.2)	4.825	0.028*
Positive attitude	12 (31.6)	47 (52.8)		
Knowledge				
Poor knowledge	4 (10.5)	8 (9.0)	0.074	0.963
Fair knowledge	3 (7.9)	7 (7.9)		
Good knowledge	31 (81.6)	74 (83.1)		

The above table showed that there was a significant association ($p=0.028$) between attitude of nurses and level of implementation towards evidence-based practice. 42 (47.2%) respondents with a negative attitude had poor practice of evidence-based nursing while 26 (68.4%) respondents with a negative attitude had good knowledge. Also, 47(52.8%) respondents with a positive attitude had poor evidence-based practice, while 12 (31.6%) respondents had good practice.

It also showed that there was no significant association ($p=0.963$) between level of practice and knowledge of respondents towards evidence-based practice.

Table 4.11: Cross tabulation of attitude of nurses against the knowledge of respondents towards evidence-based practice

Variable	Attitude of nurses		X ² -value	p-value
	Negative attitude	Positive attitude		
Knowledge				
Poor knowledge	12 (17.6)	0 (0.0)	13.496	0.001*
Fair knowledge	7 (10.3)	3 (5.1)		
Good knowledge	49 (72.1)	56 (94.9)		

The above result showed a significant association ($p=0.001$) between the attitude of nurses and the knowledge of respondents towards evidence-based practice. It showed that the respondents with poor knowledge only possessed a negative attitude 12(17.6%) without any of them possessing a positive attitude. Also, the respondents with good knowledge had a higher number of respondents with positive attitude 56 (94.9%) and also had 49 (72.1%) respondents with negative attitude



DISCUSSION

The results based on the level of knowledge indicated that majority of the nurses had good knowledge

of evidence-based practices (EBP), a small number of nurses had poor knowledge of EBP and a very small number of the nurses had fair knowledge of EBP. This is in consonance with the studies conducted by Taganoviq et al. (2023) on workers in Kosovo, Aktas and Dammar (2022) and Bankole et al. (2022) in the Federal Teaching Hospital in Edo State. The results revealed that the respondents had the highest points on knowledge about EBP, nurses were aware of the guidelines and suggestions for preventing surgical site infection and the related updates and that the majority of the respondents had a good knowledge of evidence-based practice. This may be attributed to sources of information and opportunities provided for them in their places of work to attend seminars, conferences, workshops, academic courses and training, clinical guidelines or protocols, in-service training at the healthcare facilities, mentorship from experienced nurses, and online resources, among others.

However, this is in contrast with the study by Tadese et al. (2018) in selected hospitals in Southern Ethiopia. The result indicated that nearly half of the nurses in this study had poor knowledge regarding evidence-based practice. This could be as a result of their inability to attend seminars, workshops, training, type of health institutions they work at and the locations of their health institutions. Nurses that work in public health institutions that are suited in the cities have more access to information and vice versa. The findings in table 5 under the attitude of nurses revealed that a good number of nurses possessed negative attitude towards evidence-based practice. This result is in agreement with the study by Kaur et al. (2022) at selected universities. The result displayed that majority of the participants possessed negative attitude towards the practice of evidence-based practice. This may be due to challenges they encountered while trying to implement evidence-based practice. Some of the challenges include resistance from colleagues or superiors, and resource constraints. Nevertheless, this study disagreed with the study conducted by Pervin and Hagmayer (2022) in Bangladesh. The findings indicated that professionals have favorable attitudes towards EBP. In the same light, a study by Senmar et al. (2021) indicated that nurses and midwives possessed a positive attitude towards evidence-based practice. This may be due to their service settings (public clinical, private clinical) and caseload per year. Professionals who work in private and special school settings claimed to be more willing to adopt an EBP when required and perceived a higher fit of EBPs in their work than those in public clinical settings and also because they were well informed about evidence-based practice.

The result in table 6 on the practice of evidence-based nursing showed that the majority of the nurses had poor practice of evidence-based practice (EBP). This tally with the study by Perruchoud et al. (2021) which showed that the level of practice of EBP among nurses in their daily clinical practice was low. This may be attributed to various factors such as decreased access to resources and reduced support from supervisor or colleagues. It may also be due to the respondents attitude, decreased skills in practice of evidence-based nursing, and increased workloads, among others.

A study by Megersa et al. (2023) in West Shoa Zone, Central Ethiopia disagreed with the study. The study result showed that the majority of the nurses had good EBP utilization. The



reasons may be due to the level of hospital, administrative position, level of education, knowledge about EBP, availability of time and cooperative and supportive colleagues.

Results in table 7 indicated that several factors were associated with the practice of evidence-based nursing. This is in line with the study by Pitsillidou et al. (2021) in six public hospitals in Cyprus. The result revealed that some factors influenced the practice of evidenced-based practice in nursing. Furthermore, a study carried out by Jordan et al. (2016) in a private intensive care unit in the Eastern Cape, revealed that there were challenges that influenced the practice of evidence-based practice. These may be attributed to challenges at individual and organizational levels which include lack of familiarity with EBP, individual perceptions that underpin clinical decision-making, lack of access to information required for EBP, inadequate sources to access evidence, inability to synthesize the literature available and resistance to change, organizational support, change and operations respectively.

IMPLICATION OF FINDINGS

The findings revealed that though the nurses had good knowledge, the majority of them still possessed a negative attitude which poorly affected their level of practice of evidence-based nursing. Hence, there is a need to highlight the importance of acquiring knowledge about EBP, including understanding research methodologies, critical appraisal skills and the ability to translate evidence into practice. Also, several factors were associated with the practice of evidence-based nursing; therefore, the need to foster a culture of lifelong learning, provides ongoing professional development opportunities and promotes research engagement among nurses.

CONCLUSION

The study concluded that nurses had good knowledge of evidence-based practice. This may be attributed to sources of information and opportunities provided for them in their places of work to attend seminars, conferences, and workshops, among others. It also concluded that nurses possessed negative attitude which may be due to both individual and organizational factors. Finally, it indicated that several factors such as individual perceptions, lack of access to information, lack of organizational support and others affected their practice of evidence-based nursing.



RECOMMENDATIONS

1. For continuous improvement of their knowledge, educational training opportunities, access to reliable research database and mentorship programs are needed
2. Nursing leaders and organizations should provide a favorable environment and opportunities for positive change in attitude by creating a culture that supports EBP and encourages its practice.
3. Healthcare organizations should take action and provide support to nurses in practicing EBP.
4. Factors influencing the practice of evidence-based practice should be considerably reduced.

LIMITATIONS AND FURTHER STUDIES

Respondents' unpredictable behavior constituted a constraint to the study as some were reluctant to participate in the work. Again, geographical challenge was another limitation because it was not easy for the researcher to travel from one health facility to another because it is not clustered and are situated at different towns. The researcher suggests that similar study on knowledge, attitude and practice of evidence-based practice should be conducted in tertiary health institutions located in other states. Again, other variables aside knowledge and attitude and practice of evidence-based practice among nurses should be studied. Finally, similar study on evidence-based practice should be conducted on other healthcare professionals.

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