

IMPLEMENTATION AND EVALUATION OF EVIDENCE BASED NURSING PROTOCOLS IN PUBLIC AND PRIVATE SECTOR HOSPITALS

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Abstract

Background: Evidence-based nursing protocols help standardise clinical care, reduce preventable errors, improve patient safety, and support consistent nursing practice.

Objective: To compare the implementation, adherence, perceived effectiveness, and barriers related to evidence-based nursing protocols among nurses working in selected public- and private-sector hospitals.

Methods: A comparative cross-sectional study was conducted among 384 nurses, including 256 from the public-sector hospital and 128 from the private-sector hospital, selected through proportionate stratified random sampling. Data were collected using a structured and pretested questionnaire covering demographic characteristics, knowledge, readiness, institutional support, adherence to nursing protocols, perceived effectiveness,

and implementation barriers.

Results: Private-sector nurses had significantly higher knowledge ($75.9 \pm 11.4\%$ versus $67.8 \pm 12.6\%$), readiness ($73.6 \pm 12.2\%$ versus $64.1 \pm 13.9\%$), institutional support ($72.4 \pm 13.8\%$ versus $55.7 \pm 15.2\%$), adherence ($78.6 \pm 12.5\%$ versus $64.3 \pm$

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14.8%), and perceived effectiveness scores ($79.8 \pm 11.6\%$ versus $67.9 \pm 13.7\%$) than public-sector nurses (all $p < 0.001$). High adherence was reported by 63 (49.2%) private-sector nurses compared with 57 (22.3%) public-sector nurses.

Conclusion: Evidence-based nursing protocols were implemented more consistently in the private-sector hospital. Strengthening training, staffing, access to guidelines, availability of supplies, managerial support, and regular clinical audit may improve protocol adherence, particularly in public-sector hospitals.

1.1 Background of study:

Evidence-based practice (EBP) has become a keystone of healthcare systems today, and it is essential for the quality, safety and effectiveness of patient care. Evidence-based protocols in nursing are clinical procedures and guidelines for the standard care of patients, which are developed using the best scientific evidence, clinical knowledge and patient and family concerns, in a systematic way (Arsenault et al., 2025). These protocols have been created to assist nurses in providing safe, high-quality, and consistent care to patients and reducing the risk of clinical errors, unnecessary practice variations, and negative patient outcomes. Evidence-based nursing protocols have been linked to better patient satisfaction, fewer healthcare-acquired infections, shorter hospital stays, improved patient outcomes, and improved healthcare efficiency (Galiano et al., 2020).

Nurses make up the largest part of the healthcare workforce and are directly involved in patient monitoring, medication administration, infection control, patient education, and multidisciplinary coordination of patient care. Therefore, the importance of implementing evidence-based nursing protocols for the best healthcare outcomes and patient safety cannot be overstated (Connor et al., 2023). The evidence for the benefits of nursing interventions across different clinical areas, including intensive care, surgical wards, emergency departments, and programs for chronic disease management, has been substantial. The use of standardized protocols for pressure ulcer prevention, CAUTI, medication safety, pain management, and fall prevention have shown measurable improvements in quality of patient care and in healthcare indicators (Kawar et al., 2024).

Although the role of evidence-based nursing practice is well established, several factors make its implementation difficult in healthcare. Some recurrent problems include low staffing, high workload, lack of updates to clinical guidelines, limited access to updated clinical guidelines, lack of institutional support, resistance to change, and lack of research utilization skills among nursing staff (Melnik et al., 2016). Such barriers might differ substantially between public and private sector hospitals, depending on differences in healthcare infrastructure, organizational culture, financial resources, administrative support, patient burden, and ongoing professional development opportunities. Public sector hospitals may sometimes be overcrowded, have limited resources, and have limited staffing while private sector hospitals may have better access to technology and training programs and standardized quality assurance programs. In the world, 29 million nurses play a significant role in enhancing patients' health and as part of their professional standards, nurses are expected to deliver evidence-based care (Westerlund et al., 2019). Nurses have a strong potential role to play in leading practice change; there is evidence that nurses' participation in quality improvement (QI) has a positive effect on patient, nurse and hospital outcomes. Nurses make up almost 59% of the health workforce worldwide and evidence-based nursing practice has been a key part in contemporary healthcare systems to enhance patient safety and clinical outcomes (Cullen et al., 2022). The World Health Organization estimates that preventable medical errors and HAI make up a significant proportion of the morbidity and mortality experienced worldwide, with millions of HAI cases reported annually in hospitals. It has been demonstrated that by successfully applying the evidence-based nursing protocols, the number of

hospital acquired infections can be cut down by as much as 50%, medication errors can be reduced, the length of hospital stay can be reduced and patient satisfaction can be improved significantly. With developed healthcare systems, nursing protocols are being followed in more than 70-80% of accredited institutions. Building up the expertise and skills of local staff and ensuring that protocols are consistently followed and executed remain challenges in developing countries (Noreen et al., 2025).

1.2 Problem Statement

The use of evidence-based nursing protocols is crucial for patient safety, care quality, and minimizing clinical errors while ensuring uniform care practices. Differences in infrastructure, staffing, administrative support, access to updated clinical guidelines, and access to professional training however might affect the implementation of these protocols in public and private sector hospitals. In health care system development countries like Pakistan, there is a dearth of local research findings that compare adherence to evidence-based practices of nursing across different health care sectors. Additionally, factors like workload burden, lack of resources and institutional support, could have an adverse effect on protocol implementation and patient outcomes. Thus, this study aims to assess and compare the implementation and effectiveness of evidence-based nursing protocol in public and private hospitals, determine the gaps and barriers, and offer supporting evidence for the development of evidence based nursing practice, patient safety and healthcare quality.

1.3 Significance of the Study:

This study will provide local evidence on how evidence-based nursing protocols are implemented in public and private sector hospitals and will help identify gaps in adherence, training, and institutional support. It may guide hospital administrators and policymakers in improving nursing practice, patient safety, and quality of care through stronger evidence-based systems.

1.4 Research Question:

How are evidence-based nursing protocols implemented and evaluated in public and private sector hospitals?

1.5 Research Objective:

To evaluate and compare the implementation and effectiveness of evidence-based nursing protocols in public and private sector hospitals.

1.6 Research Hypothesis:

There is a significant difference in the implementation and effectiveness of evidence-based nursing protocols between public and private sector hospitals.

2. REVIEW OF LITERATURE

The expectation of evidence-based nursing practice has become a fundamental aspect of quality hospital performance, given its connection to the best evidence, patient preferences, and professional expertise. Evidence-based practice is very much valued by nurses, but there is a lack of uniformity in implementation across institutions, with differences in the availability of knowledge, institutional support, leadership, workload and resources. A 2024 scoping review identified that professional practice and the organization where nurses work has a significant influence on implementation of EBP in routine care, and a 2025 study of nurse administrators identified leadership, training, and organizational culture as key factors in successful implementation (Furtado et al., 2024). Another theme in the literature is that evidence-based protocols contribute to the standardisation of care and patient safety. Structured protocols decrease unnecessary variation in nursing practice, increase documentation and

monitoring consistency, and facilitate safe and effective provision of nursing interventions, including assessing the risk of pressure injuries, implementing infection prevention measures, and ensuring medication safety and monitoring. Implementation research across a broader field in the hospital setting also indicates that translating evidence into routine practice goes beyond the publication of guidelines and includes systems of audit, supervision, feedback, and change management. The findings are similar to the body of implementation literature, which has established that evidence won't lead to change unless it is actively incorporated into systems of care (Alsadaan et al., 2022). The reasons why evidence-based nursing is not being put into practice have been previously documented. Factors which may lead to difficulties are a lack of staff, a lack of time, a lack of authority to alter practice, a lack of access to new journals or databases, poor managerial support, and poor training in appraisal and application of research (Golge et al., 2024). In a 2022 review in China, the primary problem that hinders the application of evidence practice in hospital settings continues to be lack of knowledge. Recent studies from Saudi Arabia and Pakistan have been similar, with nurses commenting on limited resources, no financial or institutional support, restricted access to evidence sources and opposition to breaking of the “old ways of doing things” (Yimam et al., 2025). Also found in the literature are facilitators identified. Evidence-based protocols are more likely to be adhered to by nurses who receive continuing education, mentorship, access to clinical guidelines, protected time for learning, and support from nurse managers and hospital leadership. Research in the public hospital sector has found that training exposure, positive attitudes, leadership support and resource availability are marked factors associated with EP implementation. To support the notion of the importance of systems within the hospital, a 2024 study in Ethiopia found that individual and hospital factors influenced evidence based practice implementation among nurses in public hospitals, as well. There is also a significant body of literature on aspects of protocol implementation in infection prevention and patient safety, particularly related to hospital nursing care. Standardized infection prevention and control protocols are some of the most evident examples of evidence-based nursing practice as nurses play an important role in hand hygiene, device care, wound care, isolation precautions and surveillance (Elhag et al., 2025). Recent implementation studies have demonstrated that while hospitals may claim to have an advanced protocol system, there is variability in education, multimodal strategies, monitoring, and feedback. Additionally, Pakistan has been progressing in enhancing institutional implementation by adopting national healthcare-associated infection surveillance and response guidelines, highlighting a shift towards patient safety protocol-based policies. This is important to understand: Public and private hospitals are different. Evidence-based approaches may be more challenging in public hospitals because they may be under-resourced, have fewer providers, and have more administrative constraints (National Institute of Health Pakistan, 2025). Lahore-based infection-control studies have demonstrated that education and practice can be enhanced if the care is structured according to more clearly defined standards and monitored. These results indicate that implementation is possible, but is not uniform, and probably will vary among institutions with varying governance and resource structures (Aslam et al., 2023).

3. MATERIAL AND METHODOLOGY

3.1 Study Design

A cross-sectional study was employed.

3.2 Study Setting

The study was conducted at the following hospitals:

- Aziz Bhatti Shaheed Teaching Hospital, Bhimber Road, Gujrat, Pakistan. The hospital had an estimated 500 registered nurses.

- Social Security Hospital, Gujranwala, Pakistan. The hospital had an estimated 250 registered nurses.

3.3 Study Duration

The study duration was six months after approval of the synopsis.

3.4 Sample Size

Data were collected from 384 nurses. The sample size was calculated using the WHO sample size calculator by taking a 95% confidence interval, a 5% margin of error, and an expected prevalence of 50% due to limited local Pakistani data regarding the implementation of evidence-based nursing protocols. The calculated sample size was 384 nurses.

3.5 Sampling Technique

A stratified random sampling technique was used.

3.5.1 Proportion Allocation

Public sector hospital: $n_1 = 500$

Private sector hospital: $n_2 = 250$

Total population: $N = 750$

$n_1 = 500/750 \times 384 = 256$

$n_2 = 250/750 \times 384 = 128$

Hospital	Population Size	Sample Size
Public	500	$500/750 \times 384 = 256$
Private	250	$250/750 \times 384 = 128$
Total	750	384

3.6 Sample Selection

3.6.1 Inclusion Criteria

Registered nurses, charge nurses, and head nurses working in inpatient wards, intensive care units, emergency departments, and other clinical areas of the selected public and private sector hospitals with at least six months of working experience were included in the study.

3.6.2 Exclusion Criteria

Nursing staff who were on leave during the study period, student nurses, nursing interns, administrative staff who were not directly involved in patient care, and participants who were unwilling to provide informed consent were excluded from the study.

3.7 Data Collection Procedure

Data were collected after obtaining permission from the hospital ethical committee. Eligible nursing staff were approached during duty hours, and written informed consent was obtained before enrollment. A structured and pre-tested questionnaire was used to collect data, and the questionnaire was drafted in accordance with evidence-based nursing practice guidelines. The questionnaire contained demographic details including age, gender, educational qualification, years of experience, department of work, and type of hospital. Other sections evaluated knowledge, readiness, use, and compliance with evidence-based practices related to infection control, medication administration, patient safety, documentation, fall prevention, and pressure ulcer prevention. The effectiveness of evidence-based nursing protocols was assessed through nurses' self-reported adherence to the protocols, perceived improvement in patient safety, reduction in clinical errors, infection control measures, and quality of patient care. Factors that could hinder the

implementation of evidence-based protocols, including workload burden, inadequate staffing, lack of training, limited access to updated guidelines, and lack of institutional support, were also evaluated. Participants' confidentiality and anonymity were maintained throughout the study by using coded identification numbers.

3.8 Data Analysis Procedure

The collected data were analyzed using SPSS version 20.0. Quantitative variables such as age and years of experience were presented as mean $\pm$ standard deviation, while qualitative variables including protocol adherence, awareness levels, and implementation barriers were presented as frequencies and percentages.

The chi-square test was used to compare the implementation and effectiveness of evidence-based nursing protocols between public and private sector hospitals. The independent-samples t-test was applied, where appropriate, for comparison of quantitative variables. A p-value of ≤ 0.05 was considered statistically significant.

4. RESULTS

A total of 384 nurses participated in the study, including 256 (66.7%) from the public-sector hospital and 128 (33.3%) from the private-sector hospital. The mean age of participants was 31.8 ± 7.2 years, while the mean professional experience was 7.6 ± 5.9 years. Most participants were female, held a diploma or bachelor's degree in nursing, and worked as registered or staff nurses.

Table 1. Demographic and Professional Characteristics of Participants (n=384)

Variable	Public sector (n=256)	Private sector (n=128)	Total (n=384)	p-value
Age, years	32.5 ± 7.4	30.4 ± 6.6	31.8 ± 7.2	0.007
Professional experience, years	8.3 ± 6.1	6.2 ± 5.1	7.6 ± 5.9	0.001
Male	39 (15.2)	25 (19.5)	64 (16.7)	0.286
Female	217 (84.8)	103 (80.5)	320 (83.3)	
Diploma in nursing	113 (44.1)	42 (32.8)	155 (40.4)	0.018
Bachelor's degree in nursing	119 (46.5)	67 (52.3)	186 (48.4)	
Postgraduate qualification	24 (9.4)	19 (14.8)	43 (11.2)	
Registered/staff nurse	201 (78.5)	103 (80.5)	304 (79.2)	0.847
Charge nurse	42 (16.4)	19 (14.8)	61 (15.9)	
Head nurse	13 (5.1)	6 (4.7)	19 (4.9)	
Inpatient ward	119 (46.5)	55 (43.0)	174 (45.3)	0.702
Intensive care unit	48 (18.8)	27 (21.1)	75 (19.5)	
Emergency department	54 (21.1)	25 (19.5)	79 (20.6)	
Other clinical areas	35 (13.7)	21 (16.4)	56 (14.6)	

Private-sector nurses demonstrated significantly higher knowledge, readiness, and institutional-support scores than public-sector nurses. The mean knowledge score was $75.9 \pm 11.4\%$ in the private sector compared with $67.8 \pm 12.6\%$ in the public sector, while readiness scores were $73.6 \pm 12.2\%$ and $64.1 \pm 13.9\%$, respectively. Institutional support showed the largest difference, with mean scores of $72.4 \pm 13.8\%$ in the private sector and $55.7 \pm 15.2\%$ in the public sector. Evidence-based practice training was reported by 82 (64.1%) private-sector nurses compared with 107 (41.8%) public-sector nurses.

Table 2. Knowledge, Readiness, and Institutional Support for Evidence-Based Nursing Practice

Variable	Public-sector hospital	Private-sector	p-value
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	(n=256)	hospital (n=128)	
Knowledge score, %	67.8 ± 12.6	75.9 ± 11.4	<0.001
Readiness score, %	64.1 ± 13.9	73.6 ± 12.2	<0.001
Institutional support score, %	55.7 ± 15.2	72.4 ± 13.8	<0.001
Received evidence-based practice training	107 (41.8)	82 (64.1)	<0.001
Regular access to updated clinical guidelines	112 (43.8)	91 (71.1)	<0.001
Managerial encouragement for protocol use	126 (49.2)	94 (73.4)	<0.001
Participation in clinical audit activities	72 (28.1)	58 (45.3)	0.001

Adherence to infection-prevention protocols was reported by 109 (85.2%) private-sector nurses compared with 181 (70.7%) public-sector nurses. Similar differences were observed for safe medication administration, patient identification, documentation, fall prevention, and pressure-injury prevention. The mean overall adherence score was significantly higher in the private sector (78.6 ± 12.5%) than in the public sector (64.3 ± 14.8%, $p<0.001$).

Table 3. Adherence to Evidence-Based Nursing Protocols

Nursing protocol	Public-sector hospital (n=256)	Private-sector hospital (n=128)	p-value
Infection-prevention protocol	181 (70.7)	109 (85.2)	0.002
Safe medication-administration protocol	174 (68.0)	106 (82.8)	0.002
Patient-identification and safety protocol	185 (72.3)	111 (86.7)	0.002
Standardised clinical documentation	157 (61.3)	103 (80.5)	<0.001
Fall-risk assessment and prevention	142 (55.5)	91 (71.1)	0.004
Pressure-injury risk assessment and prevention	149 (58.2)	96 (75.0)	0.001
Overall adherence score, %	64.3 ± 14.8	78.6 ± 12.5	<0.001
High adherence, ≥80%	57 (22.3)	63 (49.2)	<0.001
Moderate adherence, 60–79%	122 (47.7)	51 (39.8)	
Low adherence, <60%	77 (30.1)	14 (10.9)	

Improvement in patient safety was reported by 108 (84.4%) private-sector nurses and 182 (71.1%) public-sector nurses. Reduced medication errors, better infection-control practices, improved documentation quality, greater consistency of nursing care, and improved overall quality of care were also reported more frequently in the private sector.

Table 4. Perceived Effectiveness of Evidence-Based Nursing Protocols

Perceived outcome	Public-sector hospital (n=256)	Private-sector hospital (n=128)	p-value
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Improved patient safety	182 (71.1)	108 (84.4)	0.005
Reduced medication errors	164 (64.1)	101 (78.9)	0.003
Improved infection-control practices	179 (69.9)	106 (82.8)	0.007
Improved documentation quality	151 (59.0)	99 (77.3)	<0.001
Improved consistency of nursing care	173 (67.6)	103 (80.5)	0.009
Improved overall quality of care	181 (70.7)	107 (83.6)	0.007
Overall effectiveness score, %	67.9 ± 13.7	79.8 ± 11.6	<0.001

Excessive workload was identified by 204 (79.7%) public-sector nurses compared with 76 (59.4%) private-sector nurses, while inadequate staffing was reported by 196 (76.6%) and 69 (53.9%), respectively. Lack of training, limited access to updated guidelines, shortages of equipment or supplies, insufficient time during duty hours, and inadequate managerial support were also significantly more frequent in the public sector, with all p-values below 0.001. Resistance to change was reported by 105 (41.0%) public-sector and 43 (33.6%) private-sector nurses, but this difference was not statistically significant (p=0.160).

Table 5. Reported Barriers to Implementing Evidence-Based Nursing Protocols

Implementation barrier	Public-sector hospital (n=256)	Private-sector hospital (n=128)	p-value
Excessive workload	204 (79.7)	76 (59.4)	<0.001
Inadequate staffing	196 (76.6)	69 (53.9)	<0.001
Lack of training	153 (59.8)	49 (38.3)	<0.001
Limited access to updated guidelines	147 (57.4)	41 (32.0)	<0.001
Shortage of equipment or supplies	171 (66.8)	48 (37.5)	<0.001
Lack of time during duty hours	189 (73.8)	67 (52.3)	<0.001
Inadequate managerial support	128 (50.0)	38 (29.7)	<0.001
Resistance to change among staff	105 (41.0)	43 (33.6)	0.160

5. DISCUSSION

This study evaluated the implementation and effectiveness of EBP nursing protocols among nurses in the selected hospitals of public and private sectors. The knowledge scores of the private-sector nurse was significantly higher than that of the public-sector nurse, as was their readiness score. In addition, the private-sector nurse did not report as many organisational or resource-related barriers, and the public-sector nurse did not report as high as private-sector nurse in terms of perceived effectiveness. In addition, the scores for the nurses' knowledge was significantly higher in the private-sector hospital than in the public-sector hospital, as were the scores for readiness; the public-sector nurse did not score as high as the private-sector nurse on scores of organisational or resource-related barriers, and the private-sector nurse did not score as high as the public-sector nurse on scores for perceived effectiveness. Results indicated that in addition to individual knowledge and motivation, other organizational factors such as capacity, leadership, implementation support, and clinical working environment are crucial to

successful implementation of evidence-based nursing practice. Consistent with previous literature, the following factors were found to play a role in the adoption of evidence-based practice: availability of suitable resources, structures for implementation, supportive leadership, and clear responsibility for implementing and sustaining practice change within hospitals (Arsenault Knudsen et al., 2025; Furtado et al., 2024; Kavar et al., 2024).

One of the largest differences between the two sectors was in institutional support. The mean scores of the hospital in the private-sector was $72.4 \pm 13.8\%$ while the public-sector hospital had a mean score of $55.7 \pm 15.2\%$. Private-sector nurses were more likely to feel they had access to updated guidelines, managerial encouragement, and involved in clinical audit activities. The results suggest the critical role that nursing administration and hospital leadership play in creating a climate that promotes EBP. Nursing administration is a pivotal role in establishing priorities, planning resources, conducting training, overseeing compliance, and providing support for employees while implementing new protocols (Alsadaan et al., 2025). Yet, past studies have indicated that the implementation of evidence-based practice can be underutilized by senior nursing administration and not be represented sufficiently in hospital performance measures and/or strategic nursing initiatives (Melnik et al., 2016).

Another explanation for the increase in adherence that was seen for the private-sector hospital could be due to the way the implementation activities were organized. Hospitals that designate the implementers, clarify their role, offer continued facilitation as well as take the time to assess the complexity and feasibility of individual projects before changing practices are more likely to sustain evidence-based protocols (Arsenault Knudsen et al., 2025). Previous studies have linked successful evidence-based nursing practices implementation at the hospital level with implementation models that include education, local leadership, structured monitoring, and feedback (Galiano et al., 2020). In the same way, precision implementation strategies highlight the need to embed protocols in specific clinical workflows, within specific roles and in specific outcomes rather than as standalone written documents (Cullen et al., 2022). In both sectors, patient-identification and safety protocols were the most adhered to, albeit with significantly higher adherence to them in the private-sector hospital. Also, the implementation of infection prevention and medication administration policy was more consistently met in the private sector. These areas are essential to the care of the patient and are the areas where it is possible for preventable patient harm to occur. The higher level of adherence in these areas may be due to their being more routine in nursing practice, having more formalised procedures and being better institutionalised. The national guidance on HAI surveillance and response further highlights the importance of standardizing HAI prevention systems, frequent monitoring, staff training and institutional accountability in healthcare settings in Pakistan (National Institute of Health Pakistan, 2025). Variations in the availability of supplies, surveillance systems, staff education, and managerial surveillance may also contribute to the difference in infection-prevention adherence in the two sectors. The commitment of the organization, resources, staff acceptance, and routine assessment to evaluate the programme have been identified as key factors that influence the success of implementing an infection-prevention programme in private hospitals (Elhag et al., 2025). Thus, protocol compliance cannot be considered just a basic nursing task since it is not possible for the nurse to follow the protocol completely when required equipment, protective supplies, isolation facilities or institutional monitoring systems are not available. The clinical documentation was standardised and there was a significant difference between the two sectors. The private sector nurse population reported adherence at 80.5% while the public sector nurse population reported at 61.3%. Comprehensive records are available for continuity of care, professional communication, legal accountability, quality monitoring and clinical audit. In the public sector, less adherence could have been attributed to increased workload, lack of staffing, time pressures, or lack of a structured documentation system. There are many factors that are

suggested to influence the successful implementation of a model, including the need to align the requirements of a protocol with the capacity of the clinical setting and resources available to front-line staff (Arsenault Knudsen et al., 2025; Furtado et al., 2024). Over workload and under staffing was reported as an impediment in both hospital sectors, with a much higher prevalence in the public-sector hospital. Almost four in five public sector nurses reported that they experience excessive workload and over three-quarters of them said that staffing is a challenge. Increased workload may limit patient assessment, documentation, prevention, contacting protocols, clinical audit and continuing education. In Pakistan, evidence-based practice (EBP) was not applied due to factors such as workload, staffing shortages, and lack of training and support for nurses in tertiary hospitals (Aslam et al., 2023; Noreen et al., 2025). The nurses in public sector settings also reported more problems in accessing current guidelines and training. Continuing professional development is necessary for evidence-based practice because recommendations, technologies, and standards of care are continually evolving. If the nurse is unable to readily rely on research findings or practical guidelines, traditional routines or knowledge gained in basic training may be followed. Lack of access to evidence, poor research skills, time constraints, poor managerial support, and challenges to embed evidence into routine practice are reported to be common challenges to implementation in qualitative studies of hospital nurses (Lai et al., 2022). A similar study was conducted among public health facility nurses, which found that training, knowledge, information availability, professional experiences, and organizational support are factors that affect evidence-based practice (Yimam et al., 2025). Lack of managerial support was also a significant constraint, especially in the public-sector hospital. Evidence-based practice can be strengthened by nursing leaders in the organization by introducing evidence-based practice as a priority, organizing training, making evidence-based practice guidelines available, making sure there are enough resources, monitoring compliance, and giving feedback. Ongoing leadership support, employee commitment, implementation supports and organisational readiness have also been identified as key enablers of evidence-based practice (EBP) by nursing administrators (Alsadaan et al., 2025). If not provided, the protocols could be available in writing, but not be integrated into daily clinical practice. The only barrier assessed which did not differ significantly between the two sectors was resistance to change. This indicates that maintaining the status quo may be a common problem throughout hospitals. Resistance can occur when the protocol is not planned with the nurse or if it seems challenging to fit into a current clinical routine or if its utility is not well illustrated. Increase the likelihood of success by involving frontline staff in protocol selection, adaptation, testing and evaluation and establish clear implementation roles and responsibilities (Arsenault Knudsen et al., 2025; Galiano et al., 2020).

The results of this study are of significance for the nurse administrator and for health care policy. In order to improve the implementation of evidence based nursing practice in public hospitals, more than providing written protocols is needed. The interventions need to focus on workload, staffing, training, access to up to date guidelines, equipment availability, managerial support, and involvement in clinical audit. Hospitals implementing EBP can also include the development of evidence-based practice committees, clinical mentors, evidence-based protocol champions, evidence-based implementation teams, and regular feedback mechanisms. Organisations can support implementation of evidence to long-term clinical practice using structured implementation models which are not simply short-term educational activities (Cullen et al., 2022; Galiano et al., 2020). In general, the differences in the sector levels in this study seem to be related to differences in the readiness to implement and capacity of the organisations, not just to differences in nurses' willingness to do so. Shaping up the professional practice environment, increasing leadership involvement and equipping the resources needed for implementation can help bridge the gap between public and private hospitals. It is thus important to take into account the context of the organisation when

developing strategies to enhance evidence-based nursing practice, as well as the staffing, leadership and culture, access to evidence, and infrastructure related to implementation (Furtado et al., 2024; Golge et al., 2024).

This study had several limitations. The cross-sectional design assessed implementation and perceived effectiveness at a single point in time and could not establish causality. Adherence and effectiveness were measured through self-report and may have been affected by recall or social-desirability bias. The study included only two hospitals, which may limit the generalisability of the findings. Direct observation, record review, and patient-level outcomes were not included. In addition, institutional differences other than public or private status may have influenced the results. Despite these limitations, the study identified important differences in evidence-based nursing practice between the selected hospitals. The findings showed that stronger knowledge, readiness, institutional support, and protocol adherence were present in the private-sector hospital, while public-sector nurses experienced greater organisational and resource-related barriers.

6. CONCLUSION

Evidence-based nursing protocols were implemented more consistently in the private-sector hospital, where nurses demonstrated significantly higher knowledge, readiness, institutional support, adherence, and perceived effectiveness than those working in the public-sector hospital. Public-sector nurses reported greater challenges related to excessive workload, inadequate staffing, insufficient training, limited access to updated guidelines, shortages of equipment and supplies, time constraints, and inadequate managerial support. These findings indicate that successful evidence-based nursing practice depends not only on nurses' knowledge and willingness but also on a supportive organisational environment and adequate clinical resources. Hospital administrators and nursing leaders should therefore strengthen continuing professional education, improve staffing levels, ensure access to updated protocols and essential supplies, promote clinical audits, and provide regular supervision and feedback. Particular attention should be given to improving clinical documentation, fall-risk assessment, and pressure-injury prevention, where adherence remained comparatively low.

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