DOI: https://doi.org/10.54393/pjhs.v6i6.2963

PAKISTAN JOURNAL OF HEALTH SCIENCES
(LAHORE)
https://thejas.com.pk/index.php/pjhs
ISSN (E): 2790-9352, (P): 2790-9344
Volume 6, Issue 06 (June 2025)

Original Article

OPEN ACCESS

Barriers to the Implementation of Evidence-Based Practice in A Tertiary Care Hospital Mirpur, Azad Kashmir, Pakistan: A Cross-Sectional Study

Safia Noreen[1*], Fozia Fatima[2], Kashmala Ejaz[3], Zubaida Khatoon[4], Tanveer Kousar[1] and Rubab Tariq[1]

[1]College of Nursing, Armed Forces Post Graduate Medical Institute, Rawalpindi, Pakistan
[2]National University of Medical Sciences, Islamabad, Pakistan
[3]King Edward Medical University, Lahore, Pakistan
[4]College of Nursing, Mirpur, Pakistan

ARTICLE INFO

Keywords:
Evidence-Based Practice, Barriers, Registered Nurses, Organizational Barriers, Individual Barriers

How to Cite:
Noreen, S., Fatima, F., Ejaz, K., Khatoon, Z., Kousar, T., & Tariq, R. (2025). Barriers to the Implementation of Evidence-Based Practice in A Tertiary Care Hospital Mirpur, Azad Kashmir, Pakistan: A Cross-Sectional Study: Evidence-Based Practice Barriers in Azad Kashmir. Pakistan Journal of Health Sciences, 6(6), 69-74. https://doi.org/10.54393/pjhs.v6i6.2963

***Corresponding Author:**
Safia Noreen
College of Nursing, Armed Forces Post Graduate Medical Institute, Rawalpindi, Pakistan
s.noreen083@gmail.com

Received Date: 11th March, 2025
Revised Date: 16th June, 2025
Acceptance Date: 21st June, 2025
Published Date: 30th June, 2025

ABSTRACT

An approach to providing care to patients is based on problem-solving decisions on the greatest reliable and current data is known as Evidence-Based Practice (EBP). **Objective:** To assess the organizational and individual barriers to implementing Evidence-based practice among registered nurses in a tertiary care hospital in Mirpur, Azad Kashmir. **Methods:** A descriptive cross-sectional study was conducted from December 2023 to July 2024 at a tertiary care hospital in Mirpur, Azad Kashmir. Data were collected from 120 registered nurses from different departments with more than one year of clinical experience. The sample size was determined using the Yamane formula. Before starting the data collection process, the study protocol was approved by the Institutional Review Board, and written informed consent was obtained before data collection. A validated questionnaire comprises 24 statements on a five-point Likert scale from strongly disagree to strongly agree was used. **Results:** The most significant organizational barriers are lack of financial encouragement for using evidence-based practice (M = 4.41), inadequate resources at the workplace (M = 4.25), limited access to updated nursing journals (M = 4.39), and lack of human resources to implement EBP (M = 4.24). Resistance to adopting new strategies (M = 4.22) and limited autonomy in modifying procedures (M = 4.15) are the most common individual barriers. **Conclusions:** The study highlighted the prevalence of practical barriers that prevent nurses from implementing evidence-based practice and emphasizes the need for healthcare organizations to address them.

INTRODUCTION

Evidence-based practice is the process of transforming patients' informational needs into answerable questions, through the integration of clinical competence with patients' preferences and values, and the best available evidence [1]. Globally, health care must be grounded in the most recent scientific innovations, as emphasised by the WHO and the European Commission. Assessing the readiness of nurses before implementing Evidence-based practice is essential as it will demonstrate their effectiveness and knowledge [2]. The development of evidence-based guidelines and resources from specialised organisations like Joanna Briggs Institute and Cochrane has resulted from the emphasis on Evidence-Based Practice (EBP) in nursing in countries like the United States, the United Kingdom, and Australia since the 1990s [3]. Nurses play a critical role in two major tasks: the care of the patient and the implementation of research findings into practice. This is because of their important roles in patient care and in putting research findings into practice [4]. Nurses are the most important healthcare professionals in providing healthcare services, according to study results for better patient outcomes. Rousseau *et*

DOI: https://doi.org/10.54393/pjhs.v6i6.2963

al., explored the psychological factors influencing the implementation of evidence-based practice (EBP), highlighting how cognitive, social, and organizational dynamics affect its adoption in professional settings [5]. It is not adequate for nurses to provide care solely based on their textbook knowledge and experience; instead, they must deliver high-quality nursing care based on research findings. This is because society today has higher expectations for high-quality nursing care [6]. EBP has many advantages for nurses, such as strengthening their capacity to serve patients with safe and valid practices, developing their leadership abilities, and increasing their critical thinking skills [7]. Although the usage of the findings in the healthcare setting is important, there is still a knowledge gap regarding the practical application of these findings [8]. EBP implementation is hindered worldwide by many challenges, including staffing shortages, education, technology, time restrictions, and financial assistance [9]. Given its foundation in the relationship between clinical practice and research evidence, evidence-based nursing has gained widespread acceptance among healthcare providers. Many solid barriers and attitudes impact how EBP is understood and applied [10]. The concept of evidence-based practice is not well-known to many nurses, and several barriers prevent its application in the nursing profession [11]. A few of the things that can significantly affect a nurse's performance are heavy workloads, a lack of technological support, skills and competencies, confidence and communication skills, commitment, a high standard of work-life balance, stress at work, and motivation. It's interesting to note that the majority of these elements fall within the leadership management category [12]. A narrative review done by the Nursing department at the University of Ibadan, Nigeria, discoursed that evidence-based practice is relatively young in Africa when compared to other developing countries. Major variables that impact the adoption of EBP in these regions include a lack of time, a high burden of disease-limited resources, and poor support from the government, organisations, and professional leaders [13]. Some major barriers regarding EBP adoption were identified in a study undertaken at public hospitals in Ethiopia. Barriers to the implementation of EBP, mostly mentioned by study participants, were the lack of official EBP frameworks, poor facility infrastructure, difficulty in accessing the guidelines, and insufficient training for medical staff [14]. Although there are many researchers conducted related to evidence-based practice and its benefits on an international level, there is limited research available on this topic in the specific region of Azad Jammu Kashmir (AJK). Therefore, the study aimed to determine the organisational and individual barriers to the implementation of EBP among registered nurses in the tertiary care hospital in Mirpur, Azad Jammu and Kashmir. The contribution of this study is to fill the existing gap. It can also provide valuable insights into healthcare practices related to the implementation of EBP after identifying and eradicating those factors that are hindrances in the way of implementing EBP within the nursing culture of Pakistan. EBP has historically focused on questioning, reading, and analysing the evidence, but it has had difficulty putting the evidence into practice. Sackett's model mainly depends on considering patient values and preferences together with clinical skills utilising the best available evidence. Every aspect of healthcare has adopted and changed this model as a result of its effect [15]. Each of the components of Evidence-Based Practice (EBP) has little value by itself; it becomes significant when combined with adjacent elements. Finding, evaluating, and using the best external clinical data that is available is the first step. Numerous sources, such as case reports, different scientific designs including qualitative and descriptive research, and randomised controlled trials, can provide this data. The second component is clinical expertise, encompassing the competence and awareness that doctors acquire during their clinical practice. The application of external evidence to specific patients is determined by the clinician's skill, not by the external evidence itself, even while it offers insightful information that cannot replace clinical experience. The last step is to take the values and preferences of the patients into account, which is crucial for choosing the right course of treatment. Patients' perceptions must be taken into account when making decisions about their care since even excellent external evidence may not apply to every patient [16, 17]. Using the Sackett Model of EBP, the researcher tried to explore the concept of using evidence-based practice in this study. The researcher thinks that this model will provide the theoretical support necessary to direct appropriate and successful treatment in light of major contextual challenges (Figure 1).

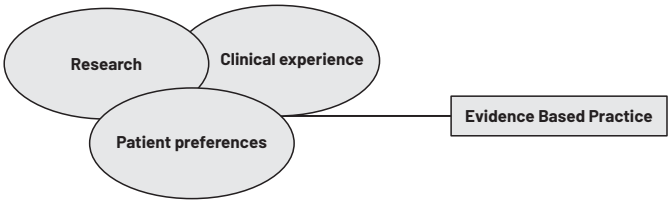

Figure 1: Evidence Based Practice Model (Sackett, 1992) [16]

METHODS

This study was conducted at a tertiary care hospital in Mirpur, AJK, because it's a teaching hospital with a nursing college offering various nursing degrees and specialties. The hospital has different departments that require evidence-based practice. A total of 173 registered nurses were identified as the study population, and a sample of 120

DOI: https://doi.org/10.54393/pjhs.v6i6.2963

nurses was selected using simple random sampling through the lottery method. The sample size was calculated using the Yamane formula with a 5% margin of error, resulting in a sample size of 120.

Yamane formula n = N / 1+N(e)2

Where n sample size

N= total population=173

E= margin of error

n=173/1+173(0.05)2 =120

The calculated sample size was 120 nurses registered by the Pakistan Nursing and Midwifery Council with over one year of experience and specific educational backgrounds (BSN/Post RN and general nursing diploma). These nurses were chosen due to their direct involvement in patient care and awareness of organizational activities. Nurses not present during data collection, and those unwilling to participate were excluded. A questionnaire regarding barriers to the implementation of EBP was used by Khammarnia in 2014 in Iran, which consists of two parts: individual barriers and organizational barriers has been used in this study. It consists of 24 statements with a Likert scale from strongly disagree to strongly agree, and respondents were asked to score according to these statements. Scoring Key: 1) SD = strongly disagree 2) D = Disagree 3) N =Neutral 4) A= Agree 5) SA = strongly agree. Demographic data about age, education and work experience was also gathered. The permission was obtained from the author via email for the tool's adaptation and use. The questionnaire's validity was confirmed by a panel of experts, and pilot testing showed it was clear and feasible. The tool's reliability was confirmed with a Cronbach's alpha score of 0.81. Before starting the data collection process, ethical approval and official permission were obtained for data collection from the Institutional Review Board committee of the tertiary care hospital Mirpur, Azad Kashmir. (REF.NO.05/ACADEMICS BLOCK TRAUMA CENTRE/SURGERY/2024). Data were collected in February 2024. To protect the data, strict measures were taken to ensure its security and confidentiality. These measures included storing electronic data on password-protected devices and securely storing hard copies in locked facilities. The study duration was from December 2023 to June 2024. Before data collection, each participant was given written informed consent and an information sheet. A forty-minute conversation was held with participants to provide a clear explanation of the questionnaire. Voluntary participation was ensured as participants had the freedom to refuse or withdraw at any time without being penalised. In addition, they were ensured in terms of confidentiality by protecting data from access by unauthorized persons. Also, participants' anonymity was ensured by assigning different codes instead of using their names. The statistical package for the social sciences (SPSS), version 24.0, for data entry and analysis was used. The study used descriptive statistics, including frequency and percentage for demographic data, and mean and standard deviation to assess individual and organizational barriers to Evidence-Based Practice implementation.

RESULTS

The study sample was 120 nurses; the maximum number of nurses (60%) is in the 22–32 age range, which suggests that the participants are mostly younger. The next largest age group is 33–43 (27.5%), followed by those 43 and over (12.5%), also shown in figure 2.

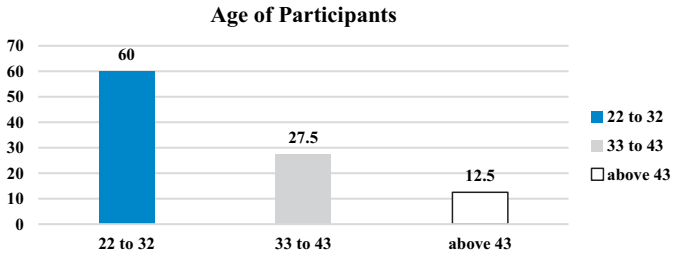

Figure 2: Percentages of Participants' Age Groups

The majority (71.7%) held a diploma in general nursing, while 28.3% had a post-RN/BSN degree, also shown in figure 3.

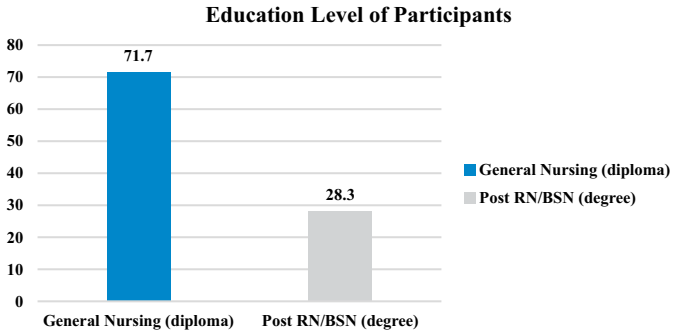

Figure 3: Education Level of the Respondent

Work experience was diverse, with the largest group (36.7%) having 5-10 years of experience, followed by 1-5 years (26.7%), 10-15 years (18.3%), and >15 years (18.3%), also shown in figure 4.

Figure 4: Job Experience of the Respondent

The most significant barriers to implementing Evidence-Based Practice (EBP) are resource-related that are revealed in Table 1. Specifically, the top barriers include: lack of financial encouragement for using evidence-based care (M = 4.41 ± 0.93), inadequate resources at the

DOI: https://doi.org/10.54393/pjhs.v6i6.2963

workplace (M = 4.25), limited access to updated nursing journals (mean = 4.39), and lack of relevant literature (M = 4.15) lack of human resources to implement EBP (M = 4.24) highlights the need for adequate staffing (Table 1).

Table 1: Organizational Barriers to Implementing EBP (n=120)

S. No.	Questions	SD	D	N	A	SA	Mean ± SD
1	Lack of knowledge among nurse managers about Evidence-Based Practice (EBP)	4.2	10	25.8	44.2	15.8	3.57 ± 1.00
2	Lack of interest in EBP by nurse managers	5.0	10.0	22.5	43.3	19.2	3.61 ± 1.06
3	The new ideas do not apply to nursing care	11.7	23.3	12.5	27.5	25	3.30 ± 1.37
4	The results of the research are not applicable in the clinical setting	13.3	20.8	11.7	31.7	22.5	3.29 ± 1.37
5	Lack of financial encouragement for nurses who use EBP	1.7	6.7	8.3	45.0	38.3	4.41 4 ± 0.93
6	The nurse managers do not have sufficient time to evaluate evidence-based nursing care	5.8	15.0	5.8	40.8	32.5	3.83 ± 1.23
7	No cooperation and participation by physicians in using EBP	5.8	18.3	7.5	26.7	41.7	3.85 ± 1.31
8	No appreciation by managers to implement EBP in patient care	7.5	29.2	12.5	25.0	25.8	3.32 ± 1.33
9	Insufficient attention by managers to the use of research in the performance of EBP	1.7	12.5	10	42.5	33.3	3.93 ± 1.04
10	No conference or workshop on the importance of the implementation of EBP by the administration for nurses	5.0	5.0	5.8	40.0	44.2	4.13 ± 1.06
11	Lack of trained (expert) staff on how to use the results of research studies in clinical practice	1.7	17.5	10.8	45.0	25.0	3.74 ± 1.07
12	Insufficient resources at the workplace	0	4.2	18.3	26.7	50.8	4.25 ± 0.89
13	Access to an updated library with nursing journals is limited	0	4.2	5.0	38.3	52.5	4.39 ± 0.77
14	Lack of relevant literature about EBP, such as Journals	1.7	5	8.3	46.7	38.3	4.15 ± 0.89
15	Lack of human resources to implement EBP	0	5.8	8.3	41.7	44.2	4.24 ± 0.84

*(SD=Strongly Disagree, D= Disagree, N=Neutral, A= Agree, SA= Strongly Agree,)

Table 2 presented a comprehensive analysis of barriers to evidence-based practice (EBP) among nurses. Key problems include insufficient knowledge of EBP (M = 3.36), resistance to adopting new strategies (M = 4.22), limited autonomy in modifying procedures (M = 4.15), and a skills gap despite valuing colleagues' recommendations (M = 3.74). Additional barriers are a lack of interest in EBP (M = 2.94), limited English proficiency (M = 3.39), insufficient computer skills (M = 3.24), and a shortage of time for literature review (M = 3.92)

Table 2: Individual Barriers to Implementing EBP (n = 120)

S. No.	Questions	SD	D	N	A	SA	Mean ± SD
1	Lack of knowledge of the implementation of EBP by nurses	9.2	19.2	7.5	54.2	10	3.36 ± 1.17
2	Difficulty in using new techniques instead of traditional methods	0.8	2.5	5.8	55.0	35.8	4.22 ± 0.73
3	Lack of autonomy to change the clinical practice of nurses for the patients	0.8	3.3	5.0	61.7	29.2	4.15 ± 0.72
4	The best information resource is the experience and recommendations of colleagues	7.5	5	15.8	49.2	22.5	3.74 ± 1.09
5	Lack of skills to implement EBP by nurses	5	21.7	24.2	31.7	17.5	3.35 ± 1.14
6	Lack of interest in EBP by nurses	13.3	40.0	9.2	14.2	23.3	2.94 ± 1.42
7	Insufficient proficiency in the English language	4.2	20.8	19.2	43.3	12.5	3.39 ± 1.07
8	Lack of ability to work with a computer	1.7	40.0	10.8	27.5	20.0	3.24 ± 1.22
9	Shortage of time to read literature (Lack of time to search strategies or practice related to EBP)	0	7.5	10.8	63.3	18.3	3.92 ± 0.76

*(SD=strongly disagree, D= Disagree, N=Neutral, A= Agree, SA= strongly agree,)

DISCUSSION

The study highlighted key barriers to implementing Evidence-Based Practice (EBP) in nursing, including organisational factors such as lack of resources (equipment and internet access), limited availability of current nursing literature, high workload, and inadequate internet access at workplaces. Individual-level barriers include resistance to change, limited autonomy to modify clinical procedures, reliance on observed rather than evidence-based knowledge, poor EBP skills, and time constraints for literature review. The findings of this study align with some studies. For instance, research in Saudi Arabia identified non-generalizability of research findings and lack of facility support as major barriers [18]. The findings of a study in Cyprus also support this study's results, highlighting barriers like limited authority to modify procedures, time constraints, and lack of cooperation from healthcare staff [19]. The study conducted by Zeb (2018) found issues such as time constraints, lack of access to research materials, and limitations in modifying patient care due to inadequate facilities, which also show similarity with the findings of this study. These consistent challenges point to a broader

DOI: https://doi.org/10.54393/pjhs.v6i6.2963

pattern faced by nurses in implementing Evidence-Based Practice (EBP) [6]. The study's findings are also congruent with research conducted in Indonesia by Rahmayanti (2020), which identified similar barriers to translating research into clinical practice, including time constraints for literature review and limited resources. These parallels highlight the common challenges nurses face in implementing evidence-based practice across different settings [20]. All of these studies together point to common challenges facing nurses in the implementation of EBP and underscore the idea that strategies targeting improvements at both organisational and individual levels are necessary to increase EBP implementation and bring about better nursing practice outcomes. This study had some limitations, including a single-hospital sample in Mirpur, which may affect generalizability, and a small, homogeneous sample that may not represent all barriers. Future research should expand to multiple healthcare settings and geographies to enhance generalizability and recruit larger, more diverse samples to provide a richer view of EBP barriers and representative findings. The study highlights the importance of addressing both the individual and organisational barriers through targeted interventions that advocate for a supportive environment that is conducive to evidence-based decision-making among nurses. The findings support healthcare systems having a culture that enables the implementation of EBP to help increase the EBP competencies of nurses to improve patient outcomes. Probably, nursing managers would wish to think of how best to prepare them through education.

CONCLUSIONS

The study concluded that barriers to implementing Evidence-Based Practice (EBP) are both organizational and individual. Organizational challenges include inadequate resources such as equipment and internet access, as well as limited availability of up-to-date nursing literature. These issues are compounded by high workloads, time constraints for literature review, and insufficient internet connectivity. On the individual level, barriers include resistance to adopting new practices, restricted clinical autonomy, and reliance on experiential knowledge over evidence-based approaches, limited proficiency in EBP methodologies, and a lack of time for engaging in research activities. To overcome these challenges, it is recommended to implement targeted training programs that focus on building EBP skills, improving access to resources, and offering ongoing staff support.

Authors Contribution

Conceptualization: SN
Methodology: SN, KE, ZK, TK, RT
Formal analysis: FF, KE
Writing, review and editing: SN, FF, KE, SK, TK, RT

All authors have read and agreed to the published version of the manuscript

Conflicts of Interest

All the authors declare no conflict of interest.

Source of Funding

The author received no financial support for the research, authorship and/or publication of this article.

REFERENCES

[1] Poiroux L, Bruyneel A, Larcin L, Fossat G, Kamel T, Labro G *et al.* Barriers to research findings utilization amongst critical care nurses and allied health professionals: An international survey. Intensive and Critical Care Nursing. 2024 Apr; 81: 103610. doi: 10.1016/j.iccn.2023.103610.

[2] Aslam S, Farooq Z, Azam S, Naheed F, Yaqoob R. Barriers in implementing evidence-based practice among nurses at tertiary care hospitals of lahore: barriers in implementing evidence-based practice. NURSEARCHER (Journal of Nursing & Midwifery Sciences). 2023 Dec: 43-6. doi: 10.54393/nrs.v3i02.53.

[3] Yoo JY, Kim JH, Kim JS, Kim HL, Ki JS. Clinical nurses' beliefs, knowledge, organizational readiness and level of implementation of evidence-based practice: The first step to creating an evidence-based practice culture. PLOS One. 2019 Dec; 14(12): e0226742. doi: 10.1371/journal.pone.0226742.

[4] González LM, Fonseca DA, Bermeo RN. Evidence-based practice competences in nursing students at a university in Colombia. Nurse Education Today. 2021 Dec; 107: 105094. doi: 10.1016/j.nedt.2021.105094.

[5] Rousseau DM, Gunia BC. Evidence-based practice: The psychology of EBP implementation. Annual review of psychology. 2016 Jan; 67(1): 667-92. doi: 10.1146/annurev-psych-122414-033336.

[6] Zeb A, Riaz M, Emmanual S, Rehman N, Qudrat S. Barriers to evidence based nursing practice in tertiary care hospitals of Peshawar, Pakistan. Biomedical Journal of Scientific & Technical Research. 2018; 8(1): 5. doi: 10.26717/BJSTR.2018.08.001592.

[7] Mohamed RA, Alhujaily M, Ahmed FA, Nouh WG, Almowafy AA. Nurses' experiences and perspectives regarding evidence-based practice implementation in healthcare context: A qualitative study. Nursing

DOI: https://doi.org/10.54393/pjhs.v6i6.2963

Open. 2024 Jan; 11(1): e2080. doi: 10.1002/nop2.2080.
[8] Alatawi M, Aljuhani E, Alsufiany F, Aleid K, Rawah R, Aljanabi S *et al.* Barriers of implementing evidence-based practice in nursing profession: A literature review. American Journal of Nursing Science. 2020 Jan; 9(1): 35-42. doi: 10.11648/j.ajns.20200901.16.
[9] Crawford CL, Rondinelli J, Zuniga S, Valdez RM, Tze-Polo L, Titler MG. Barriers and facilitators influencing EBP readiness: Building organizational and nurse capacity. Worldviews on Evidence-Based Nursing. 2023 Feb; 20(1): 27-36. doi: 10.1111/wvn.12618.
[10] Majid S, Foo S, Luyt B, Zhang X, Theng YL, Chang YK, *et al.* Adopting evidence-based practice in clinical decision making: Nurses' perceptions, knowledge, and barriers. Journal of the Medical Library Association. 2011 Jul; 99(3): 229–236. doi: 10.3163/1536-5050.99.3.010
[11] Eslami J, Saeedi AA, Najafi Kalyani M. Assessing Evidence-Based Practice in Operating Room Nursing Students: A Cross-Sectional Study in the Southwest of Iran. The Scientific World Journal. 2024 May; 2024(1): 5552711. doi: 10.1155/2024/5552711.
[12] Alsadaan N, Salameh B, Reshia FA, Alruwaili RF, Alruwaili M, Awad Ali SA *et al.* Impact of nurse leaders behaviors on nursing staff performance: a systematic review of literature. INQUIRY: The Journal of Health Care Organization, Provision, and Financing. 2023 Jun; 60: 00469580231178528. doi: 10.1177/00469580231178528.
[13] Olabode O. Determinants of Adoption of Evidence-Based Practice among Nurses for Clinical Decision-Making within Primary Health Care Facilities: A Narrative Review. Journal of Nursing Care Research. 2024 Jan; 5(1): 1-9.
[14] Dessie G, Jara D, Alem G, Mulugeta H, Zewdu T, Wagnew F *et al.* Evidence-based practice and associated factors among health care providers working in public hospitals in Northwest Ethiopia during 2017. Current Therapeutic Research. 2020 Jan; 93: 100613. doi: 10.1016/j.curtheres.2020.100613.
[15] Dusin J, Melanson A, Mische-Lawson L. Evidence-based practice models and frameworks in the healthcare setting: a scoping review. British Medical Journal Open. 2023 May; 13(5): e071188. doi: 10.1136/bmjopen-2022-071188.
[16] Sackett DL. Evidence-based medicine. InSeminars in perinatology 1997 Feb; 21(1): 3-5. doi: 10.1016/S0146-0005(97)80013-4.
[17] Lakens D. Sample size justification. Collabra: psychology. 2022 Mar; 8(1): 33267. doi: 10.1525/collabra.33267.
[18] Alqahtani JM, Carsula RP, Alharbi HA, Alyousef SM, Baker OG, Tumala RB. Barriers to implementing evidence-based practice among primary healthcare nurses in Saudi Arabia: A cross-sectional Study. Nursing Reports. 2022 Apr; 12(2): 313-23. doi: 10.3390/nursrep12020031.
[19] Rahmayanti EI, Kadar KS, Saleh A. Readiness, barriers and potential strenght of nursing in implementing evidence-based practice. International Journal of Caring Sciences. 2020 May; 13(2): 1203-11.
[20] Pitsillidou M, Roupa Z, Farmakas A, Noula M. Bariéry implementace ošetřovatelství založeného na důkazech zdravotními sestrami do praxe. Kontakt. 2020 Apr; 22(2): 85. doi: 10.32725/kont.2020.017.