ORIGINAL ARTICLE

Views of Nurses on Evidence-Based Practices and Factors Hindering the Use of These Practices: A Qualitative Study

Hemşirelerin Kanıta Dayalı Uygulamalara İlişkin Görüşleri ve Bu Uygulamaların Kullanımını Engelleyen Faktörler: Nitel Bir Çalışma

⬥ Esra Türker[1], ⬥ Yavuz Tanrıkulu[2], ⬥ Gözdenur Tanrıkulu[3]

[1]Department of Nursing, Lokman Hekim University Faculty of Health Sciences, Ankara, Türkiye
[2]First and Emergency Aid Program, Lokman Hekim University Vocational School of Health Services, Ankara, Türkiye
[3]Dialysis Program, Lokman Hekim University Vocational School of Health Services, Ankara, Türkiye

Abstract

Introduction: The aim of this study is to reveal nurses' views on evidence-based practices (EBPs) and the factors that hinder the use of these practices.

Methods: This qualitative and descriptive study was conducted between April and August 2021. The study sample consisted of 15 nurses working in university hospitals in Ankara and Konya city centers. An information form and a semi-istructured interview form were used to collect data. To reveal the views of nurses on EBPs, interviews were conducted with nurses who have been working in the hospital for at least 1 year in a quiet environment where they felt ready, between April and August 2021, via Zoom. The data were coded using the MAXQDA 20 Plus program. Consolidated criteria for reporting qualitative research was used in the structuring and reporting phase of the qualitative research.

Results: Five main themes emerged in this study. The themes, which are light of science, professional approach, teamwork, barriers to EBPs, and resistance to change, are compatible with the literature.

Discussion and Conclusion: As a result, it is recommended to give lectures on EBPs in university education, organize seminars about EBPs during in-service training, and follow EBP guidelines, especially for nurse managers, to increase the use of EBPs.

Keywords: Evidence-based practice; Nursing; Qualitative study

Innovations and changes in the field of health have revealed the importance of using evidence-based practices (EBPs) in treatment and care practices. EBPs are defined as the process of collecting data, interpreting, evaluating, and performing EBPs.

EBP, which started with Florence Nightingale in the 1800s, continues to progress with the discipline of nursing.[1] The main purpose of nursing practice is to establish a solid foundation for EBP and to make the best use of this foundation for nurses. Today, experience and textbook knowledge

alone are not sufficient for nursing care.[2] They need to systematically collect the best research evidence from clinical nurses, benefit from their nursing experience, and consider patients' preferences when making professional decisions.[3]

Evidence-based nursing has been one of the main policies of the health system in the last two decades. In many countries, EBP guidelines have been developed, and the principle that decisions must be evidence-based has been adopted.[4] EBP is defined as a problem-solving approach to health care that integrates the best evidence from well-defined studies and care data and matches patient preferences with the health care professional's value expertise. [5,6] EBPs play a key role in the quality of patient care.[7] In general, the transfer of research results to clinical practice supports the improvement of quality of care by increasing the reliability of interventions and reducing costs.[4] EBPs help bridge the gap between nursing practice and education differences.[7]

There are barriers to the acceptance, adoption, and implementation of EBPs by nurses.[8] These barriers include not investigating the findings, not understanding statistical analysis, and lack of time.[9] The speed of accepting and implementing EBPs is quite low.[10] To develop strategies that will accelerate the evidence-based nursing process, the first step to be taken is to know the attitudes of nurses about the subject.[11] Thus, this study aims to reveal the views of nurses on EBPs, their use of these practices, and the factors that hinder their use of the EBPs.

Materials and Methods

The research is an interpretive phenomenological study based on descriptive analysis designed in a qualitative design to reveal the views of nurses on EBPs. The consolidated criteria for reporting qualitative research (COREQ) were followed in the study.[12]

Qualitative research is a research design with a flexible structure, in which there is no set rule for the sample size, and the sample size is determined in line with the research question and purpose.[13] The sample of the study consisted of 15 nurses working in Konya and Ankara city centers, and data collection was terminated at the 15th interview when the data reached saturation. The participant nurses were selected for the purpose of the study. To obtain a higher amount and variety of data and to ensure external validity, nurses who differ from one another in terms of education level, years of experience, unit (e.g., ward, intensive care, and operating room), and position (e.g., nurse and managing nurse) were included in the sample.

Table 1. Semistructured interview form

1. What does EBP mean?
2. Do you include EBPs in your own initiatives? How do you include them?
3. How do you access EBPs? Do you get any support on this?
4. What are the challenges you face when implementing EBPs?
5. What do your managers in your institution think about EBPs? Do you have a corporate policy?
6. Would you like to receive training on EBPs?

The Information Form and a semistructured Interview Form developed by the researchers in line with the literature were used to collect data.[14,15] In addition, the interview guide consisting of 6 questions, given in Table 1, was used during the interviews, and the interviews were audio and video recorded with the consent of the participants.

The data were collected through semistructured in-depth individual interviews as recommended in the literature. [16] To reveal the views of nurses on EBPs, interviews were conducted with nurses who have been working in the hospital for at least 1 year in a quiet environment where they felt ready, between April and August 2021, via Zoom. Each interview took approximately 32.9 min. An audio recorder and online platform recording features were used to record the data.

Data Collection

Data analysis is defined as making sense of data between concrete pieces of data and abstract concepts, induction and deduction.[17,18] In the analysis of the data obtained within the scope of the research, the content analysis method, which is used in qualitative research and used as an auxiliary element in the analysis of the data, was used. The data obtained were supported by using descriptive analyses. Before starting this analysis, data were collected with semistructured interview questions and audio files were recorded and translated into written text. In this process, the texts were read repeatedly and during the interview, to prevent data loss. Parts not related to the questions asked were marked by the researcher to be excluded from the analysis. As there was no confusion in the analysis process and confidentiality was taken as a basis, code names such as P1, P2, etc. were given to the participants. Analysis was carried out in three stages: data analysis, data identification, and data interpretation. Audio recordings of all interviews were deciphered manually, and COREQ was used to construct and report the qualitative data.[17] Content analysis by Graneheim et al.[18] was also used in the thematic data analysis.

Table 2. Sociodemographic characteristics of nurses (n=15)

Participant	Gender	Age	Level of education	Type of hospital	Years of experience	City
P1	Male	28	Graduate	University	5	Konya
P2	Female	25	Graduate	University	2	Konya
P3	Male	27	Graduate	Public	4	Konya
P4	Female	31	Postgraduate	Public	7	Ankara
P5	Female	37	Graduate	Public	13	Ankara
P6	Female	34	Postgraduate	Private	11	Ankara
P7	Female	28	Graduate	University	5	Konya
P8	Female	26	Postgraduate	University	3	Ankara
P9	Female	27	Graduate	University	4	Konya
P10	Female	29	Postgraduate	Public	6	Ankara
P11	Female	30	Graduate	Public	6	Ankara
P12	Male	28	Graduate	University	4	Konya
P13	Male	27	Postgraduate	Private	3	Ankara
P14	Male	26	Postgraduate	Public	2	Konya
P15	Female	26	Postgraduate	University	2	Ankara

Data Analysis

The data were coded using qualitative data analysis software MaxQDA 20 Plus (VERBI Software GmbH, Berlin, Germany). After the coded texts were created individually by the researchers, they were grouped under themes and subthemes. Criteria such as reliability, consistency, confirmability, and transferability were taken into account in the data obtained.[17,18] Credibility depends on the reality of the findings obtained by the researcher and being objective. Transmissibility research results by readers require similar meanings. For this reason, direct quotations were used and detailed comments were included. Consistency refers to the consistent handling of the variables of the research process. To ensure consistency in the research, the same procedures were carried out in data collection and analysis, and the opinions of the same experts were taken while taking the expert opinion. Verifiability is the continuous updating of the results obtained in the studies and supporting one another with the data. After the transcripts were rearranged, they were returned to the participants for comments and corrections. After corrections, the findings were reevaluated by each researcher. The results of this research are presented based on the data. After the development of the theme and subthemes, two experts were consulted on qualitative research. After the expert opinion was completed, the statements were translated from Turkish to English by a native English speaker.

Ethical Considerations

Prior to the study, permission was obtained from the university ethics committee (Non-Invasive Clinical Research Ethics Committee Decision No. 2021/050, Code Number: 2021048). The Informed Consent Form prepared by the researchers to inform the participants about the study was read and approved by the participants before the interview. It was written in the Informed Consent Form that a voice recorder would be used during the interviews, and the participants were ensured that their identities and the voice recordings would be kept confidential. The study was conducted taking into account the Declaration of Helsinki.

Results

Information about the participants is given in Table 2. The age of participants is between 25 and 37 years. Five nurses are males and 10 are females. Seven nurses have a postgraduate education level. Seven nurses work at different university hospitals. The average year of experience of the nurses is 5 years. Eight of the participants work in Ankara, and 7 of them work in Konya.

The study was conducted to reveal the views of nurses on EBPs, their use of the EBPs, and the factors that hinder their use of these practices. The findings related to the experiences of the participants in the research are grouped under five themes and ten subthemes (Table 3).

Table 3. Codes, subthemes, and themes

Codes	Subthemes	Themes
Research	Research	Light of science
Basis, evidence, justification, trust, accurate-clear information	Evidence	
Patient care, not giving harm, customized care, patient satisfaction	Professionalism	Professional approach
Evaluation, professional awareness, dependent-independent role, hierarchy confusion	Professional perception	
Being unable to be together	Team	Teamwork
Inefficacy, language of science, evaluation, education level	Difficulty	Barriers to evidence-based practices
Fear	Pressure	
Avoidance, workload	Burden	
Traditional approach, inability to keep up, not researching, routineness, frustration, experience, trial and error	Master–apprentice	Resistance to change
Innovation, acceptance, rebellion, change, resistance to change	Change	

Theme 1: Light of Science

The participants had a common opinion about the scientific aspect of nursing regarding EBPs.

Research

The participants stated that nurses who want to do research with the advance in technology can devote some time and do literature research:

> *I both did a graduate degree and attended an English course despite the busy schedule they always mention. That means one can always find time. However, I believe there is always time for those who want to do research. (P 13)*

Another participant emphasized the importance of research in every field of nursing as follows:

> *When they realize how beneficial evidence-based practices can be for patients, they will use these existing guidelines and will want to do research. (P 8)*

Evidence

To reveal the knowledge and views of the participants about evidence, the nurses were posed the question, "What is evidence?" The participants provided different answers to the question:

> *I think it is evidence-based and confirmed practices; that is, the practices on which there is scientific research. (P 9)*

> *I think evidence is the thing with which we prove the correctness or incorrectness of a situation or an opinion. (P 12)*

Theme 2: Professional Approach

The participants argued that nursing should be professional and said that they do not want to be seen as the assistant of a physician.

Professionalism

The nurses in the study stated that nursing is a combination of science and art and professional practice and defined professionalism as the development of their independent roles:

> *We have nursing diagnoses. There are points where we can make decisions freely in nursing diagnoses because if nursing is a profession with a science and art aspect, we need evidence and research. (P 6)*

Professional Perception

In our study, some nurses attributed the reason why the EBPs are not used much by nurses in the clinic to their professional perception. The participants stated that nurses experience this situation as a result of the confusion between their dependent and independent roles:

> *I have seen that independent roles do not develop in nurses who do not have a graduate degree, but who are more senior in the clinic than us and who have seen nursing only as being an assistant to a physician for many years. (P 14)*

> *Nurses cannot act independently about any intervention or practice. It is not possible to question this decision as a nurse. There is a commitment to a doctor's request. (P 13)*

Theme 3: Team Work

The participants argued that in the field of health, being patient-based is for the benefit of the patient and that ideas should be shared within the team regardless of the titles people possess. They pointed to the importance of sharing EBPs with the entire team.

Team

The nurses in the study agree that patient treatment and care are teamwork, and they generally used positive expressions while conveying their experiences on this subject:

> We can generally exchange ideas within the team because we take care of the patients as a team. Since I am the one who directly applies what is prescribed during the care, I can evaluate whether it works for the patient and I can give feedback. Then, we can have a discussion on the treatment option. (P 3)

> Actually, we do not generally make decisions about the patient on our own. No members of the health care team can do this. I talk about the patient's treatment with the physician, other people responsible for that patient, or with the nurses I work with in the same team. (P 5)

Theme 4: Barriers to EBPs

The participants stated that they have difficulties applying EBPs in patient care.

Difficulty

The nurses mentioned language difficulties in reaching and applying EBPs and emphasized the importance of learning a foreign language:

> There is a lack of resources in Turkish. The number of studies conducted in Türkiye is limited, and the nurses without a graduate or post-graduate degree do not know any language other than Turkish and cannot translate from one language to another, mainly from English to Turkish, which makes reaching foreign sources difficult. (P 6)

> Language abilities can be a factor. After all, not all studies are in Turkish and it is necessary to follow foreign sources. However, they do not know a foreign language, and they do not try to learn one. (P 15)

Pressure

The participants mentioned the pressure they experienced and the dilemmas experienced among team members while applying EBPs as follows:

> I actually want to first do some research and gain knowledge and then apply what is necessary. However, unfortunately they do not let me do this. (P 2)

Burden

The participants generally stated that EBPs should be used in the nursing profession, and research should be conducted on them. However, they stated that the workload of the nurses prevents this, and nurses consider doing research a burden:

> The nurses in my clinic believe that research is a waste of time. They say they are already exhausted and it is very difficult for them to devote time to research. (P 1)

> I think people do not want to do anything; they do not want to read and be open to change anymore because of long working hours. (P 10)

Theme 5: Resistance to Change

The participants stated that the nursing profession should be open to change and that traditional methods should now be replaced by research and science.

Master–Apprentice

The participants briefly defined the vision of nursing management in the institutions they work at as a commitment to the traditions and master–apprentice relationship. One participant expressed his experiences as follows:

> I can't tell someone who is more senior than myself that he or she is doing it wrong. If I say this to a new nurse, he or she says, 'The senior taught me that way'. In short, the master-apprentice relationship still continues and we cannot do anything about it. (P 11)

Two participants stated that they were disturbed and upset by how the nursing profession is perceived:

> There is a master-apprentice relationship in the clinic where I work. This was the case before I came here. I'm afraid it will probably continue after I leave. (P 7)

Change

The participants identified traditional commitment as the reason for the lack of change in general. One participant expressed the traditional commitment in the unit where she works and her personal initiatives as follows:

> There is traditional commitment. They are not open to change. They are a bit insistent on not changing the usual practices. However, I continued to do as I know. There is no change in any of my practices. There may be some reactions from some people, but I will continue my practices in the way I know. (P 4)

Discussion

The participants in this qualitative study on nurses' views on EBPs and the factors that prevent the use of these practices argued that EBPs are important and should be used; however, they have difficulties in applying these practices. The difficulties identified in our research regarding the inability to use EBPs are similar to many studies in the literature.[18–20]

The participants believe that studies conducted and EBPs should be included in clinical practices. A study revealed that the EBP awareness of nurses with higher education levels was statistically significantly higher.[19] Another study reported that nurses with a postgraduate degree and following scientific journals and congresses received higher scores on EBPs.[21,22] The nurses in our study defined the word evidence as proof and a situation in which everyone clearly confirms the right or the wrong. A similar study in the literature states that the word evidence has the same meaning for nurses.[23]

In the field of nursing, EBPs ensure the provision of quality patient care based on research and information, as opposed to traditional practices or the recommendations of colleagues as "as we always do."[24] As far as the difficulties they experienced in using the EBPs, the participants mentioned the educational differences between the nurses and stated that they could not speak a common language. Based on this result, it is predicted that the different levels of nursing education in Türkiye may continue as an important barrier to the use of EBPs in the clinical field for a while.[25] In addition, our study revealed that the participants perceived their professionalism differently. There are still nurses who see themselves as assistants to physicians, especially as a result of not developing their independent aspects. Furthermore, in parallel to some studies in the literature, the same barriers are expected to continue due to the fact that the nurses who are in the managerial position do not create the institutional culture despite the educational difference among nurses.[22,26]

The nurses in our study advocated patient-centered care and stated that the health service provided is teamwork. However, they further stated that they could not organize and use the EBPs sufficiently, especially due to their educational and professional perspective. Similar studies have also reported that nurses still have difficulties in terms of being a team and an organization.[11,22,23] It is stated in the literature that managing nurses play an important role in creating an organizational culture at all levels of the health system to support EBPs and strategies that support practices.[25,26]

The nurses in our study reported that among the difficulties they experienced in using the EBPs are lack of time, workload, and not knowing specifically English. Öztürk et al.[27] found that important barriers for nurses to use the knowledge derived from research are lack of time, not collecting research results in a single center, limited opportunities in the implementation of research results, and not having enough time to read the research. Another study revealed that 52.7% of the nurses in the study knew a foreign language, and 55.9% did not know the sources from which they could find evidence about nursing practices.[28] In our study, it was concluded that due to the difficulties listed by the nurses, the nursing profession could not effectively use the EBPs in treatment and care. In this context, it is recommended that nurses benefit from EBPs, they are supported in terms of EBPs through training, seminars, and congresses, and the use of EBP guidelines has increased in clinics for the effective implementation of the nursing process in professional care services.[29]

Limitations

In this study, which was conducted to determine the views of nurses on EBPs, more quantitative data available in the literature were used due to the scarcity of qualitative studies. In addition, since the study is a qualitative one, the findings should be evaluated as the data obtained from 15 nurses who participated in the study.

Conclusions

With a qualitative research design, this study aimed to reveal the use of EBPs by nurses based on their own views regarding their nursing experiences. The participants believe that studies conducted and EBPs should be included in clinical practices. As far as the difficulties they experienced in using the EBPs, the participants mentioned the educational differences between the nurses and stated that they could not

speak a common language. In addition, our study revealed that the participants perceived their professionalism differently. There are still nurses who see themselves as assistants to physicians, especially as a result of not developing their independent aspects. The findings revealed that the factors affecting the use of EBPs coincide with the factors reported in previous studies. Based on the findings, it is recommended that courses related to EBPs are offered during university education, seminars on EBPs are held during the in-service training period, and especially managing nurses follow EBP guidelines to increase the use of EBPs.

References

1. Mackey A, Bassendowski S. The History of Evidence-Based Practice in Nursing Education and Practice. J Prof Nurs 2017;33(1):51–5. [CrossRef]

2. Zhou F, Hao Y, Guo H, Liu H. Attitude, knowledge, and practice on evidence-based nursing among registered nurses in traditional chinese medicine hospitals: A multiple center cross-sectional survey in China. Evid Based Complement Alternat Med 2016;2016:5478086. [CrossRef]

3. Stetler CB. Evidence-based nursing: What it is and what it isn't. Nurs Outlook 2001;49(6):286. [CrossRef]

4. Yurtsever S, Altıok M. Evidence-based practices and nursing. F.Ü. Saglık Bil. Dergisi 2006;20(2):159–66.

5. Kocaman G. Evidence-Based Practice in Nursing. HEMAR-G 2003;2:61–9.

6. Chrisman J, Jordan R, Davis C and Williams W. Exploring evidence-based practice research. Nurs. Made Incred. Easy 2014;12:8–12. [CrossRef]

7. Chien LY. Evidence-based practice and nursing research. J Nurs Res 2019;27(4):e29. [CrossRef]

8. 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. J Med Libr Assoc 2011;99(3):229–36. [CrossRef]

9. McKenna HP, Ashton S, Keeney S. Barriers to evidence-based practice in primary care. J Adv Nurs 2004;45(2):178–89. [CrossRef]

10. Pravikoff DS, Tanner AB, Pierce ST. Readiness of U.S. nurses for evidence-based practice. Am J Nurs 2005;105(9):40–51. [CrossRef]

11. Yılmaz M, Gürler H. Opinions of nurses in relation to evidence-based practice. F.N. Hem. Derg 2017;25(1):1–12. [CrossRef]

12. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007;19(6):349-57.

13. Aksayan S, Emiroğlu ON. Hemşirelik araştırma raporlarının yöntem sunumu açısından değerlendirilmesi. HEMAR-G Dergisi 1999;1(1):41–6.

14. Scott SG, Bruce RA. Determinants of innovative behaviour: A path model of individual innova-tion in the workplace. Acad Manag Ann 1994;37(3):580–607. [CrossRef]

15. Kleysen RF, Street CT. Towards a multi-dimensional measure of individual innovative behavior. J Intellect Cap 2001;2(3):284–96. [CrossRef]

16. Polit DF, Tatano C, Williams BL. Essentials of nursing research: methods, appraisal, and utilization. Nurse Res 2006;13(4):91–92. [CrossRef]

17. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3(2):77–101. [CrossRef]

18. Graneheim UH, Lindgren BM, Lundman B. Methodological challenges in qualitative content analysis: A discussion paper. Nurse Educ Today 2017;56:29–4. [CrossRef]

19. Susam A, Arslan S. Evidence-based practice awareness of intensive care nurses in the preven-tion of central venous catheter-associated infections. Turkiye Klin J Medical Sci 2020;12(4):457–64. [CrossRef]

20. Demir Y, Ak B, Bilgin NC, Efe H, Albayrak E, Çelikpençe Z. Barriers and facilitating factors to research utilization in nursing practice. J Contemp Med 2012;2(2):94–101.

21. Dikmen Y, Filiz NY, Tanrıkulu F, Yılmaz D, Kuzgun H. Attitudes of intensive care nurses towards evidence-based nursing. Int J Health Sci Res 2018;8:138–43.

22. Şen SE, Yurt S. Determining Nurses' Attitudes Towards Evidence-Based Practices. DEUHFED 2021;14(2),102–7.

23. Yurt S, Kolaç N, Şadi ED. Nurses' views on the use of evidence-based practice in the clinic: A qualitative study. J Educ Res Nurs 2021;18(2):150–5. [CrossRef]

24. Beyea SC, Slattery MJ. Evidence-based practice in nursing: a guide to successful implementation. Marblehead:Healthcare Compliance Company;2006.

25. Babadağ K, Kara M. Evidence-based nursing and professionalization. HYO Dergi 2004;7(2):112–7. [CrossRef]

26. Kajermo NK, Unden M, Gardulf A. Predictors of nurses' perceptions of barriers to research utilization. J. Nurs. Manag.2008;16(3):305–14. [CrossRef]

27. Öztürk A, Kaya N, Ayık S, Uygur E, Cengiz A. Barriers to use of research results in nursing practice. İÜFN Hem Derg 2010;18(39):144–155.

28. Yılmaz E, Çeçen D, Aslan A, Kara H, Kızıl TH, Mutlu S. Cerrahi kliniklerde çalışan hemşirelerin kanıta dayalı hemşireliğe yönelik tutumları ve araştırma kullanımında algıladıkları engeller. HEAD 2018;15(4):235–241.

29. Senyuva E. Nursing education and evidence based practice. Florence Nightingale J Nurs 2016;24(1):59–65.