

# Strategies to improve evidence-based practice competencies in nursing education: Addressing the need of the hour

Dear Sir,

With great interest, we read the recent article by Rani, Manisha *et al.*,<sup>[1]</sup> “Augmenting the spirit of research among nursing personnel: A narrative review.” We found the study very interesting and well-written regarding the strategies to develop research capacity among nurses. We would like to contribute additional insights to the article. Nurses are the backbone of every healthcare system and approximately 59% of health professionals are nurses. Nursing represents a continuously evolving field where the emphasis lies on enhancing knowledge, establishing standardized practices, and elevating the quality of care delivered by nursing professionals. They must incorporate the current evidence-based interventions and seamlessly integrate research findings into the outcome of patient care. The evidence-based practice (EBP) possesses the potential to reshape clinical approaches, provide better patient care by customizing the care processes to individual patient conditions, and ultimately lead to improved patient outcomes. Nurses’ clinical decision-making must be based on the most current and available research evidence and knowledge. Enhanced research skills not only elevate the quality and standards of nursing care but also pave the way for personal and professional growth. Nurses regularly encounter diverse obstacles that hinder their capacity to engage in research utilization and effectively apply their research findings to their clinical practice.<sup>[2]</sup> In undergraduate nursing programs, students are introduced to the research process, but it is necessary to make them understand the connection between the concept and the process of EBP. Developing research skills empowers them to embrace EBP right from the outset of their professional journey. Therefore, identifying the research barriers among students is an essential step for integrating EBP in the future.

*Student-level barriers* are lack of time to read and do research, resistance to change, fear of criticism, misconceptions about research, inadequate training in research and statistical skills, increased workload, difficulty in understanding the language and jargon, lack of interest, lack of administrative support and supervision, lack of access to the internet and library, lack of

confidence in critical appraisal skills, and research results are not generalizable to their organization.<sup>[3]</sup>

*Administrative-level barriers* are lack of funds, inadequate curricular integration, faculty resistance or inexperience, limited institutional support, lack of faculty support and role modeling, limited time allocation to teach students, and inadequate faculty training.<sup>[3]</sup>

Continuous training and education are essential to enhance the knowledge and skills of nurses to use EBP, which is required not only at the advanced level of training but also at the entry level of nursing education. A systematic approach should be taken in the development of the nursing curriculum to enhance the EBP competencies of undergraduate nursing students. The nursing educator is essential in linking research and practice and ensuring well-designed, evidence-based teaching strategies to achieve learning outcomes based on the best evidence.<sup>[4]</sup>

*Strategies that can be used to overcome barriers to EBP are as follows:* Incorporate EBP throughout the curriculum starting from the early stage of the nursing program. Ensure students have access to up-to-date research databases, journals, and evidence-based guidelines. Faculty development programs on concepts, research methods, and their effective application. Adopting a student-centered approach in teaching research (project-, case-, and problem-based learning) encourages them to develop research skills.<sup>[5]</sup> Involving students in hands-on experience in research projects, clinical case studies, and scientific publications during the undergraduate level contributes significantly to the development of minimum required skills for active research after graduation, especially practice in data analysis, problem-solving questions, critical reading of literature, and scientific writing. In clinical postings, encourage students to question and explore the evidence behind decisions. Provide constructive feedback to students and encourage self-reflection on their learning.

Make sure students are aware and use the technology-assisted research skills of reference management software tools like Zotero, Mendeley, and Endnote, making referencing and citations much easier than the manual.<sup>[6]</sup> Students should be familiar with any one of the quantitative data analysis software like SPSS, STATA, R studio, and NVIVO for qualitative data analysis. The online grammar checkers (Grammarly) and paraphrasing (Quillbot) help students in their writing. The nursing students must attend regular workshops and courses on research methodology, which help to acquire knowledge in research topics rapidly. Conducting classroom seminars, journal clubs, and regular self-reading journal articles have potential benefits to support EBP skills. Students should develop the research skill of assessing the quality and accuracy of the information they receive from multiple sources apart from classroom teaching.

The students should be encouraged to perform an academic research project during their undergraduate independently. These strategies will help nursing students become aware of the knowledge and skills required for EBP to produce better outcomes in their nursing profession.

The aim of nursing education is to teach and provide high-quality health care, which must be based on the best available evidence. The COVID-19 pandemic highlighted the importance of relying on the best available evidence, the experience of healthcare practitioners, and patients' treatment preferences, to provide the highest quality care. EBP has been shown to increase patient safety and improve patient safety clinical outcomes, reduce healthcare costs, and reduce disparities in patient outcomes. Nurses are responsible for providing high-quality care. The high quality of care typically evolves from evidence-based research into clinical practice.<sup>[7]</sup> The knowledge acquired through evidence-based research may lead to the revision of standard nursing care policies and procedures in practice. The nursing student's research skills should be assessed periodically to ascertain their competency and minimize the gap between research and practice among future nurses. Incorporating evidence-based research into nursing education has the potential to enhance the quality of healthcare, nurture critical thinking abilities, reduce medical errors, improve accountability, maintain up-to-date knowledge, promote research skills, align with accreditation standards, and advance professional development. Identifying the barriers to EBP among nursing students is essential for improving healthcare quality, enhancing nursing education, and ensuring that future nurses are well-equipped to provide evidence-based, patient-centered care.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

**Suganya Panneerselvam<sup>1</sup>,  
Senthilkumar Ramasamy<sup>2</sup>**

<sup>1</sup>Department of Psychiatric Nursing, College of Nursing, All India Institute of Medical Sciences, Raipur, Chhattisgarh, India, <sup>2</sup>Health System Strengthening, State Health Resource Centre, Raipur, Chhattisgarh, India

**Address for correspondence:** Mrs. Suganya Panneerselvam, Department of Nursing, All India Institute of Medical Sciences, Raipur, Chhattisgarh, India.  
E-mail: pssuganya@gmail.com

## References

1. Rani M, Podder L, Bhardwaj G. Augmenting the spirit of research among nursing personnel: A narrative review. *J Family Med Prim Care* 2024;13:10-4.
2. Black AT, Balneaves LG, Garossino C, Puyat JH, Qian H. Promoting evidence-based practice through a research training program for point-of-care clinicians. *J Nurs Admin* 2015;45:14-20.
3. Khammarnia M, Haj Mohammadi M, Amani Z, Rezaeian S, Setoodehzadeh F. Barriers to implementation of evidence based practice in Zahedan Teaching Hospitals, Iran, 2014. *Nurs Res Pract* 2015;2015:357140.
4. Yusof Y, Taridi N, Mustapa M, Shaharuddin S, Hamid M, Shakrin N, *et al.* Student-centred approach in medical education: A review of the teaching-Learning activities and the perceptions of educators on the students engagement and performance at the faculty of medicine and defence health, national defence university of Malaysia. *Adv Hum Biol* 2022;12:101-7.
5. Harerimana A, Mtshali NG. Types of ICT applications used and the skills' level of nursing students in higher education: A cross-sectional survey. *Int J Afri Nurs Sci* 2019;11:100163.
6. Evidence-based practice and COVID-19: Strategies for healthcare leaders. Available from: <https://dhge.org/about-us/blog/what-is-evidence-based-practice>. [Last accessed on 2023 May 10].
7. Panneerselvam S. Quality assurance a key to success in nursing: An overview. *Int J Health Sci* 2017;7:234-9.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Received:** 15-02-2024

**Revised:** 07-03-2024

**Accepted:** 07-03-2024

**Published:** 26-07-2024

#### Access this article online

##### Quick Response Code:



##### Website:

<http://journals.lww.com/JFMPC>

##### DOI:

10.4103/jfmpc.jfmpc\_237\_24

**How to cite this article:** Panneerselvam S, Ramasamy S. Strategies to improve evidence-based practice competencies in nursing education: Addressing the need of the hour. *J Family Med Prim Care* 2024;13:3441-2.

© 2024 Journal of Family Medicine and Primary Care | Published by Wolters Kluwer - Medknow