

Nursing Students' Perceptions of Teaching Method Effectiveness: A Cross-Sectional Descriptive Study

¹Dr. Sangeetha Freddy, ²Mrs. Lijo.S.George, ³Mrs. Rasiya Razak J, ⁴Mrs. Resmi S R

¹Associate Professor, ²Lecturer, ³Lecturer, ⁴Lecturer

¹Department of Community Health Nursing

¹Little Flower College of Nursing, Thiruvananthapuram, Kerala

¹sanshafreddy@yahoo.com, ²lijo.s.george@gmail.com, ³rasiyarazakj@gmail.com, ⁴resmisr18@gmail.com

Abstract

Background: Effective teaching methods play a crucial role in nursing education by promoting knowledge acquisition, clinical competence, critical thinking, and professional skills. Understanding nursing students' perceptions of different teaching methods is essential for improving teaching practices and enhancing learning outcomes.

Objective: To assess nursing students' perceptions of the effectiveness of lecture method, demonstration and return demonstration, simulation-based learning, problem-based learning, clinical teaching, and e-learning/blended learning.

Methods: A descriptive cross-sectional study was conducted among 80 undergraduate nursing students using a structured questionnaire based on a five-point Likert scale. Data were analyzed using descriptive statistics, including frequency, percentage, mean, standard deviation, and the Friedman test to compare students' perceptions of the six teaching methods.

Results: The majority of the participants were female (82.5%), aged 21 years (28.8%), studying in the seventh semester (51.2%), and had prior clinical exposure (93.8%). Nursing students perceived all six teaching methods positively. Demonstration and Return Demonstration received the highest perceived effectiveness score (Mean = 3.94 ± 0.56), followed by Problem-Based Learning (Mean = 3.90 ± 0.52), Clinical Teaching (Mean = 3.89 ± 0.60), Simulation-Based Learning (Mean = 3.87 ± 0.56), and E-learning/Blended Learning (Mean = 3.86 ± 0.57). The Lecture Method received the lowest mean score (Mean = 3.78 ± 0.51). Although Demonstration and Return Demonstration obtained the highest mean rank (4.18) and Lecture Method the lowest (2.97), the Friedman test revealed no statistically significant difference in students' perceptions across the six teaching methods ($\chi^2 = 9.34$, $df = 5$, $p = 0.096$).

Conclusion: Nursing students perceived all six teaching methods as effective in supporting their learning. Although Demonstration and Return Demonstration was the most highly rated teaching method, the absence of statistically significant differences suggests that each teaching method contributes meaningfully to nursing education. Integrating multiple teaching strategies may provide a comprehensive and effective learning experience for nursing students.

Keywords: Nursing education, teaching methods, lecture method, demonstration and return demonstration, simulation-based learning, problem-based learning, clinical teaching, e-learning.

1. INTRODUCTION

Nursing education is at the forefront of preparing healthcare professionals to meet the demands of a rapidly evolving healthcare landscape. As the healthcare industry continues to advance, nurse educators must embrace innovative teaching strategies to equip students with the knowledge and skills needed to excel in their careers. These strategies enhance students' clinical competence and foster critical thinking, communication, and problem-solving abilities.

Teaching methods in nursing education have evolved significantly from traditional didactic lectures to more interactive, student-centered approaches. Contemporary nursing pedagogy encompasses lecture methods, demonstration and return demonstration, simulation-based learning (SBL), problem-based learning (PBL), clinical teaching, and e-learning/blended learning modalities. Each method offers distinct advantages: lectures provide foundational theoretical knowledge; demonstrations develop psychomotor skills; simulation creates safe practice environments; PBL enhances critical thinking; clinical teaching bridges theory-practice gaps; and e-learning offers flexibility and accessibility.

Research has consistently demonstrated that simulation-based learning improves student satisfaction and self-confidence, with mean satisfaction scores exceeding 4.2 out of 5 in recent studies (Gaspar & Banayat, 2024; Demirtas et al., 2021). Similarly, PBL has been shown to enhance critical thinking, academic motivation, and teaching satisfaction compared to traditional lecture methods (González Hernando et al., 2014; Towfik et al., 2024).

However, the effectiveness of these methods is often context-dependent and influenced by implementation quality, resource availability, and student characteristics. Despite the growing body of literature on innovative teaching methods in nursing education, there remains a need for institution-specific assessments that capture the unique perceptions and preferences of student populations. Understanding how students perceive and value different teaching approaches is critical for curriculum refinement, faculty development, and resource allocation. This study aims to fill this gap by comprehensively evaluating nursing students' perceptions of multiple teaching methods within a single academic setting.

2. METHODS

2.1 Study Design

A cross-sectional descriptive survey design was employed to assess nursing students' perceptions of various teaching methods.

2.2 Participants

A total of 80 nursing students participated in the study. Participants were recruited across multiple semesters of a Bachelor of Science in Nursing (BScN) program. Inclusion criteria required enrollment in the nursing program and willingness to participate. The sample comprised students from 1st through 8th semesters, with the majority in 5th and 7th semesters.

2.3 Instruments

A structured questionnaire was developed covering six teaching method domains: (1) Lecture Method (3 items), (2) Demonstration & Return Demonstration (3 items), (3) Simulation-Based Learning (3 items), (4) Problem-Based Learning (3 items), (5) Clinical Teaching (3 items), and (6) E-Learning/Blended Learning (3 items). Each item was rated on a 5-point Likert scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. The questionnaire also included demographic variables (age, gender, semester of study, clinical exposure status) and three open-ended questions regarding preferred teaching methods, least preferred methods, and suggestions for improvement.

2.4 Data Analysis

Data were analyzed using descriptive and inferential statistics. Frequencies and percentages were calculated for categorical variables. Mean composite scores were computed for each item and teaching method category.

3. RESULTS

Table 3.1: Frequency and Percentage Distribution of Nursing Students according to the demographic variables

(N = 80)

S. No:	Demographic Variables	Sub-categories	Frequency (f)	Percentage (%)
1.	Age	18	6	7.5
		19	7	8.8
		20	10	12.5
		21	23	28.8
		22	17	21.3
		23	13	16.3
		24	1	1.3
		25	1	1.3
		28	1	1.3
2.	Gender	Male	14	17.5
		Female	66	82.5
3.	Semester	1st Semester	17	21.3
		3rd Semester	1	1.3
		5th Semester	21	26.3
		7th Semester	41	51.2
4.	Clinical Exposure	Yes	75	93.8
		No	5	6.2

Table 3.1 shows that the largest proportion of nursing students (28.8%) were 21 years of age, followed by 22 years (21.3%) and 23 years (16.3%). Students aged 20 years constituted 12.5% of the sample, while 18- and 19-year-old students represented 7.5% and 8.8%, respectively. Only one student (1.3%) each belonged to the age groups of 24, 25, 28, and 29 years. The majority of the nursing students were female (82.5%), whereas 17.5% were male. The table indicates that more than half of the students (51.2%) were studying in the 7th semester, followed by 26.3% in the 5th semester and 21.3% in the 1st semester. Only one student (1.3%) belonged to the 3rd semester. Table reveals that 93.8% of the nursing students had prior clinical exposure, whereas only 6.2% reported having no clinical exposure.

Table 3.2: Perceived Effectiveness of Different Teaching Methods among Nursing Students

N=80

S. No:	Teaching Method	Mean	SD	Rank
1	Demonstration & Return Demonstration	3.94	0.56	1
2	Problem-Based Learning (PBL)	3.90	0.52	2
3	Clinical Teaching	3.89	0.60	3
4	Simulation-Based Learning	3.87	0.56	4
5	E-learning / Blended Learning	3.86	0.57	5
6	Lecture Method	3.78	0.51	6

The table 3.2 shows that the highest perceived effectiveness score was observed for Demonstration and Return Demonstration (Mean = 3.94 ± 0.56), followed by Problem-Based Learning (Mean = 3.90 ± 0.52) and Clinical Teaching (Mean = 3.89 ± 0.60). Lecture Method received the lowest mean score (3.78 ± 0.51). Overall, students rated all teaching methods positively, with mean scores close to 4 on a 5-point Likert scale.

Table 3.3: Nursing students' perceptions of the effectiveness of six teaching methods: lecture method, demonstration, simulation-based learning, problem-based learning, clinical teaching, and e-learning/blended learning.

Test	χ^2	df	p-value
Friedman Test	9.34	5	0.096

Table 3.3 indicates that the differences in perception scores across the six teaching methods were not statistically significant, $\chi^2(5, N = 80) = 9.34, p = .096$.

Table 3.4: Comparison of Nursing Students' Perceptions Regarding Different Teaching Methods Using the Friedman Test

(N = 80)

S.No:	Teaching Method	Mean Rank
1	Demonstration & Return Demonstration	4.18
2	Problem-Based Learning	3.74
3	Clinical Teaching	3.60
4	Simulation-Based Learning	3.34
5	E-learning / Blended Learning	3.17
6	Lecture Method	2.97

The Friedman test results (N = 80) show that **Demonstration & Return Demonstration** obtained the highest mean rank (4.18), indicating it is perceived as the most effective teaching method. It is followed by **Problem-Based Learning (3.74)** and **Clinical Teaching (3.60)**, reflecting a strong preference for active and practice-oriented learning methods.

Simulation-Based Learning (3.34) and **E-learning/Blended Learning (3.17)** received moderate rankings, suggesting they are viewed as supportive but less effective than direct clinical and demonstration methods. The **Lecture Method (2.97)** received the lowest mean rank, indicating it is the least preferred teaching approach.

Overall, students show a clear preference for experiential and student-centered teaching methods over traditional lectures.

Table 3.5: Summary of Perceived Effectiveness of Teaching Methods

N=80

S. No:	Teaching Method	Interpretation
1	Lecture Method	Positively perceived; comparatively lowest mean score
2	Demonstration & Return Demonstration	Highest perceived effectiveness
3	Simulation-Based Learning	Highly effective for skill development
4	Problem-Based Learning	Highly effective in promoting critical thinking
5	Clinical Teaching	Highly effective for practical learning
6	E-learning / Blended Learning	Positively perceived and flexible learning approach

Table 3.5 summarizes the overall perception of nursing students regarding the effectiveness of the six teaching methods. Although Demonstration and Return Demonstration emerged as the most preferred teaching method based on the highest mean score, all teaching methods were perceived positively by the students. The statistical

analysis further indicated that these differences were not significant, suggesting that nursing students considered each teaching method to be effective in supporting their learning experiences.

Summary

The findings of the study indicate that nursing students had an overall positive perception of the effectiveness of all six teaching methods. Demonstration and Return Demonstration received the highest perception score, whereas the Lecture Method received the lowest score among the six methods. However, the Friedman test showed that these differences were not statistically significant ($\chi^2 = 9.34$, $df = 5$, $p = 0.096$), indicating that students perceived all the teaching methods to be similarly effective in enhancing their learning. These findings suggest that incorporating a combination of teaching methods may provide a comprehensive and effective learning experience for nursing students.

4. DISCUSSION

The present study assessed nursing students' perceptions of the effectiveness of six teaching methods, namely lecture method, demonstration and return demonstration, simulation-based learning, problem-based learning, clinical teaching, and e-learning/blended learning. Overall, nursing students perceived all six teaching methods positively, with mean scores ranging from 3.78 to 3.94 on a five-point Likert scale. Although Demonstration and Return Demonstration obtained the highest mean score and Lecture Method the lowest, the Friedman test indicated that these differences were not statistically significant ($\chi^2 = 9.34$, $df = 5$, $p = .096$). These findings suggest that students considered each teaching method to be effective in supporting their learning and highlight the importance of using multiple teaching approaches in nursing education.

4.1 Lecture Method

The Lecture Method recorded the lowest mean perception score (Mean = 3.78, SD = 0.51) among the six teaching methods. Nevertheless, the score indicates that students still viewed lectures positively. Lectures continue to play an important role in delivering theoretical knowledge and providing a structured foundation for learning. Previous studies have reported that conventional lectures remain effective for knowledge acquisition, especially when integrated with interactive teaching strategies and audiovisual aids. Thus, lectures continue to be an essential component of nursing education when combined with other learner-centered approaches.

4.2 Demonstration and Return Demonstration

Demonstration and Return Demonstration received the highest perceived effectiveness score (Mean = 3.94, SD = 0.56) and the highest Friedman mean rank (4.18), indicating that students preferred this teaching method over the others. This finding is consistent with the practical nature of nursing education, where direct observation followed by supervised practice facilitates the acquisition of psychomotor skills and enhances students' confidence in performing clinical procedures. Similar findings have been reported in previous studies, which identified demonstration-based teaching as one of the most effective instructional strategies for developing clinical competence.

4.3 Simulation-Based Learning

Simulation-Based Learning was positively perceived by the nursing students (Mean = 3.87, SD = 0.56), indicating that students recognized its value in developing clinical knowledge, decision-making, and practical skills in a safe learning environment. Simulation enables students to integrate theoretical concepts with clinical practice without compromising patient safety. The findings are supported by previous research demonstrating that simulation improves students' confidence, competence, and preparedness for clinical practice.

4.4 Problem-Based Learning

Problem-Based Learning (Mean = 3.90, SD = 0.52) was one of the highest-rated teaching methods, ranking second in both mean score and Friedman mean rank. This finding suggests that students appreciate learning through real-life clinical problems that encourage active participation, self-directed learning, and critical thinking. Previous studies have similarly reported that Problem-Based Learning enhances analytical thinking, clinical reasoning, and collaborative learning among nursing students.

4.5 Clinical Teaching

Clinical Teaching also received a high perception score (Mean = 3.89, SD = 0.60), indicating that students considered clinical postings an effective component of their nursing education. Clinical learning provides opportunities to apply theoretical knowledge in real healthcare settings under faculty supervision, thereby strengthening clinical competence, communication skills, and professional confidence. These findings are consistent with previous literature emphasizing the importance of experiential learning in nursing education.

4.6 E-learning/Blended Learning

E-learning/Blended Learning obtained a positive perception score (Mean = 3.86, SD = 0.57), suggesting that students considered this method an effective supplement to conventional teaching. Blended learning provides flexibility, improves access to learning resources, and supports self-directed learning. Previous studies have demonstrated that integrating online learning with face-to-face instruction enhances student engagement and learning outcomes, particularly in nursing education.

4.7 Comparison of Teaching Methods

Although Demonstration and Return Demonstration obtained the highest mean score and Lecture Method recorded the lowest, the Friedman test demonstrated that the differences among the six teaching methods were not statistically significant ($\chi^2 = 9.34$, $df = 5$, $p = .096$). This finding indicates that nursing students perceived all six teaching methods to be similarly effective in facilitating learning. Therefore, rather than relying on a single instructional approach, nursing educators should integrate multiple teaching methods to address diverse learning needs and improve educational outcomes.

4.8 Demographic Characteristics

The demographic findings showed that most participants were 21 years of age (28.8%), female (82.5%), enrolled in the 7th semester (51.2%), and had prior clinical exposure (93.8%). These characteristics indicate that the majority of participants possessed sufficient academic and clinical experience to evaluate the effectiveness of different teaching methods. The predominance of female participants reflects the gender distribution commonly observed in nursing education.

Overall Discussion

The findings of the present study demonstrate that nursing students value a variety of teaching methods in nursing education. Although Demonstration and Return Demonstration emerged as the most preferred method and the Lecture Method received the lowest mean score, all six teaching methods were perceived positively. The absence of a statistically significant difference among the teaching methods suggests that each approach contributes meaningfully to student learning. Therefore, nursing education should continue to adopt a blended instructional approach that integrates lectures, demonstrations, simulation-based learning, problem-based learning, clinical teaching, and e-learning to provide a comprehensive, learner-centered educational experience.

5. IMPLICATIONS FOR PRACTICE

Based on the study findings, the following recommendations are proposed for nursing education programs:

1. **Enhance Lecture Engagement:** Transform traditional lectures into interactive sessions using audiovisual aids, case studies, and periodic engagement checks. Pre-class distribution of materials can improve preparation and note-taking.
2. **Expand Demonstration Opportunities:** Increase hands-on practice time for clinical skills and ensure that demonstrations are followed by supervised return demonstrations.
3. **Optimize Simulation Design:** Address time constraints by expanding simulation lab schedules and ensuring that sessions include adequate debriefing time. Follow Jeffries' Simulation Framework by emphasizing clear objectives, appropriate fidelity, and structured debriefing (Jeffries, 2005).
4. **Integrate PBL Systematically:** Incorporate PBL cases that bridge theoretical knowledge with clinical scenarios, fostering critical thinking and collaborative problem-solving.
5. **Strengthen Clinical Teaching:** Enhance faculty-student ratios in clinical settings to provide more individualized guidance and mentorship.
6. **Invest in E-Learning Infrastructure:** Address technical barriers through improved IT support, reliable platforms, and digital literacy training for students and faculty.
7. **Adopt a Blended Curriculum:** Design curricula that strategically combine multiple teaching methods, leveraging the strengths of each while mitigating individual limitations.

6. LIMITATIONS

This study has several limitations. The cross-sectional design precludes causal inferences. The sample was drawn from a single institution, limiting generalizability. The predominantly female sample may not capture male students' unique perspectives. Self-reported perceptions may not fully reflect actual learning outcomes. The absence of a validated instrument limits comparability with other studies. Future research should employ longitudinal designs, multi-institutional samples, and objective outcome measures.

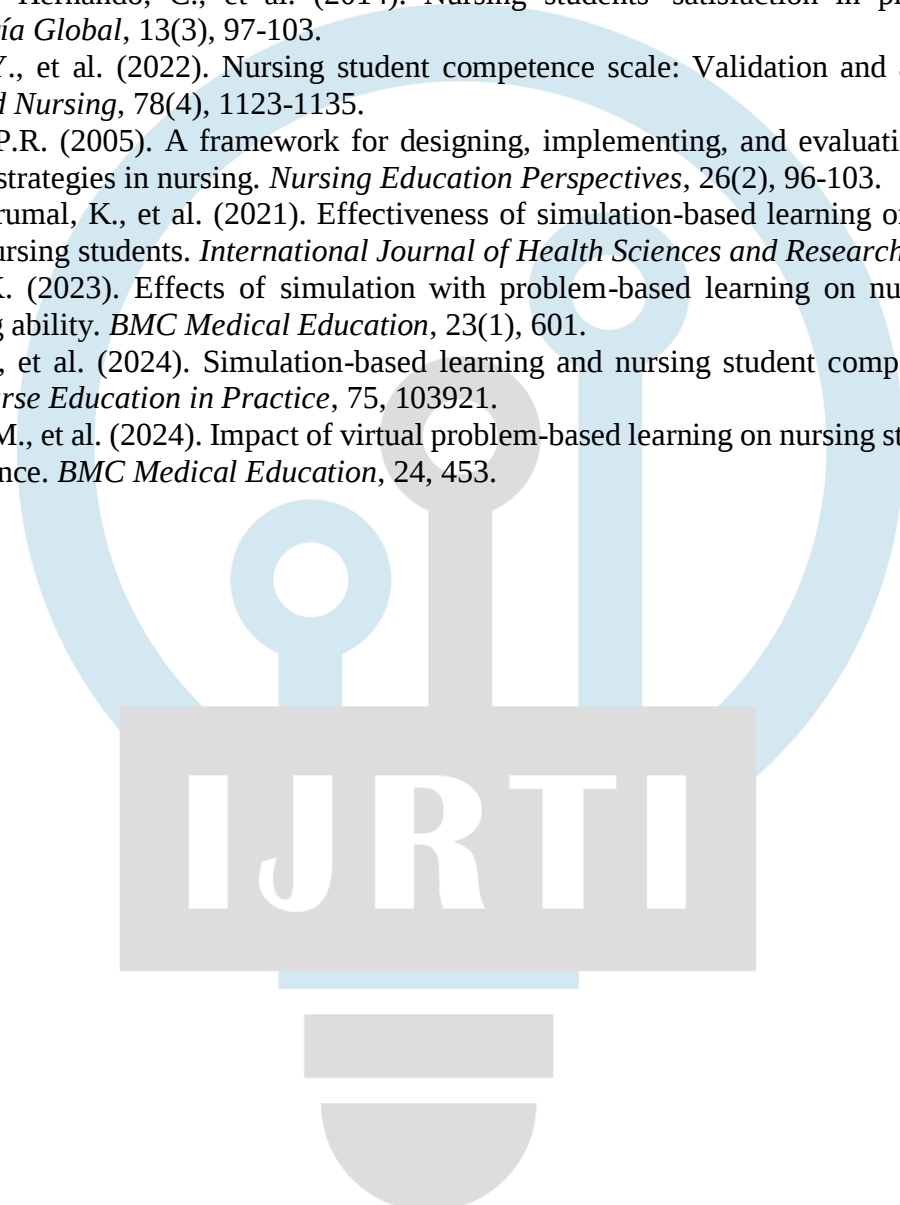
7. CONCLUSION

This study demonstrates that nursing students perceive demonstration-based learning, problem-based learning, and clinical teaching as the most effective pedagogical approaches, while traditional lectures—unless enhanced with technology—are viewed as the least engaging. Students strongly endorse a blended approach combining multiple teaching methods. The findings highlight the need for nursing education programs to transition from teacher-centered to student-centered pedagogies, invest in simulation and technology infrastructure, and address barriers to e-learning implementation. By aligning teaching methods with student preferences and evidence-based best practices, nursing educators can enhance learning outcomes, student satisfaction, and ultimately, clinical competence.

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