



Case-Based Approach to Improve FDAR Nursing Documentation Practices Among Selected Fourth-Year Nursing Students

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Abstract:

This action research examined the effectiveness of a case-based approach in improving FDAR nursing documentation practices among selected fourth-year nursing students at Riverside College, Inc. An exploratory sequential mixed-methods design was employed, which combined quantitative and qualitative data collection. Quantitative data was collected through a Self-Assessment Tool for Nursing Documentation Practices questionnaire administered to the participants before and after implementing the case-based approach. The results showed significant improvements in the students' documentation practices, including their ability to focus on relevant information, collect and analyze data, determine appropriate actions, and accurately document responses. Qualitative data were gathered through focus groups and interviews to gain insights into the students' experiences and perceptions of the case-based approach and its impact on their documentation practices. The qualitative findings comprehensively understood the intervention's effects and complemented the quantitative results. The study highlights the effectiveness of the case-based approach in enhancing FDAR nursing documentation practices among selected fourth-year nursing students. It emphasizes integrating interactive and practical learning experiences to bridge the theory-practice gap. The findings suggest incorporating case-based teaching strategies into nursing education curricula to address documentation deficiencies and better prepare students for their nursing careers while improving patient care outcomes. Further research is recommended to explore the long-term impact of the case-based approach on nursing students' documentation practices and patient outcomes. Additionally, gathering additional insights through qualitative methods can help refine educational interventions in this area. The study contributes to the growing knowledge of effective teaching strategies for improving nursing documentation practices.

Keywords: nursing documentation, case-based approach, FDAR(Focus-Data-Action-Response), mixed-methods design, educational interventions.

Introduction:

Nursing documentation is crucial in healthcare practice by ensuring accountability, effective communication, and continuity of care while adhering to legal and ethical requirements. In the Philippines, nursing practice regulations align with the National Nursing Core Competency Standards, emphasizing the importance of accurate and comprehensive nursing documentation as evidence of nursing interventions and patient outcomes (BON, CHED-TCNE, & ILO, 2014).

Performance Indicator number 6 of CMO, 15 s 2017 of CHED, emphasizes the importance of accurately and comprehensively reporting and documenting client care. This includes documenting the client's responses, nursing care services rendered, and the processes and outcomes of the nurse-client working relationship. It also emphasizes the need to ensure the completeness, integrity, safety, accessibility, and security of information while adhering to protocols and principles of confidentiality in record-keeping and information release (Commission on Higher Education, 2017).

However, nursing students often require assistance in developing their documentation skills and applying theoretical knowledge in practical settings, creating a gap between theory and practice. Inadequate nursing documentation has been associated with patient safety issues, emphasizing the need for interventions that enhance nursing education and practice (Bjerkar et al., 2021; Hashemiparast et al., 2019).

This research examined the effectiveness of implementing a case-based approach to improve Focus-Data-Action-Response (FDAR) nursing documentation practices among selected fourth-year nursing students. The primary objective was to explore how the case-based approach enhanced the students' documentation skills and their ability to apply theoretical knowledge in practical settings.

The case-based approach is a teaching method that utilizes realistic scenarios and case studies to simulate real-life nursing situations (Harvard Graduate School of Education & The Derek Bok Center for Teaching and Learning, n.d.). In this study, the case-based approach was integrated into the Related Learning Experiences (RLE) component, providing students with hands-on experiences and opportunities to apply their theoretical knowledge in practical settings. Realistic scenarios and case studies required accurate and comprehensive documentation,



encouraging students to analyze and document the patient's condition, identify relevant nursing diagnoses, plan interventions, and evaluate patient outcomes using the FDAR documentation framework.

The choice of fourth-year nursing students for this research was justified by their position in the transition period between novice and competent practitioners, according to Patricia Benner's Theory of Novice to Expert (Benner, 1982). This period is significant as it represents a critical stage in the development of nursing practice, where students are expected to move from relying on rules and norms to demonstrating intuitive knowledge and making clinical judgments based on experience. This research aimed to bridge the gap between theoretical knowledge and practical application in nursing documentation practices and support their transition to become competent practitioners.

While previous research has explored the impact of case-based teaching strategies on various aspects of nursing education, such as critical thinking and clinical decision-making, there is a need for more literature regarding the effectiveness of a case-based approach in improving FDAR nursing documentation practices among fourth-year nursing students. Existing studies must adequately address the specific issue of nursing documentation practices through the case-based approach. Therefore, this research aimed to fill this gap and contribute to the existing literature by investigating the impact of the case-based approach on nursing documentation skills.

Existing literature supports that case-based teaching strategies positively influence nursing students' critical thinking, self-confidence, and clinical decision-making abilities (Ma & Zhou, 2022; Hammad, 2020). These approaches expand teaching methods, increase student enthusiasm, and foster autonomous learning (Liu et al., 2020). The case-based approach has also been associated with enhanced student satisfaction, motivation, attendance, and interest in the subject matter (Shohani et al., 2023).

A study conducted by Ghorbanian (2022) examined how competency-based education affected nurses' documentation abilities. The researchers found that when the Mann-Whitney statistical test considered the significance level, the mean age, sex, interest in nursing, and importance level of nursing documentation did not differ significantly between the control and intervention groups. However, this study did not specifically focus on the case-based approach and its impact on nursing documentation practices among fourth-year nursing students. Therefore, this research aimed to address the gap in the literature by investigating the effectiveness of a case-based approach in improving FDAR nursing documentation habits among fourth-year nursing students. A mixed-methods approach, incorporating quantitative and qualitative components, was utilized to gather comprehensive data. The research methodology, data collection, and analysis are described in subsequent sections of this paper. This research sought to enhance nursing education and practice by investigating the impact of a case-based approach on improving FDAR nursing documentation practices among selected fourth-year nursing students. The findings of this study will provide valuable insights for educators, curriculum developers, and nursing practitioners, guiding evidence-based strategies to improve nursing documentation practices and enhance the overall quality of patient care.

Objectives of the Study:

This study sought to examine the differences in nursing documentation practices before and after implementing a case-based approach to improve FDAR nursing documentation among fourth-year nursing students, considering age, gender, and number of clinical rotations. This research incorporated a mixed-methods approach, including both quantitative and qualitative components. The research questions that guided this study were as follows:

- 1) How do fourth-year nursing students perceive the effectiveness of the case-based approach in improving their FDAR nursing documentation practices?
- 2) What are the experiences of fourth-year nursing students in utilizing the case-based approach to enhance their FDAR nursing documentation practices?
- 3) What challenges do fourth-year nursing students encounter in implementing the case-based approach and improving their FDAR nursing documentation practices?
- 4) What is the level of performance on FDAR nursing documentation practices among fourth year nursing students when grouped according to age, gender and number of clinical rotations before the intervention.
- 5) What is the level of performance on FDAR nursing documentation practices among fourth year nursing students when grouped according to age, gender and number of clinical rotations after the intervention?
- 6) Is there a significant difference in the pre- and post-test scores of fourth-year nursing students' FDAR nursing documentation practices following the implementation of a case-based approach?

Methodology:

Research Design

The chosen research design chosen for this study is action research, which emphasizes cooperation and problem-solving to bring about positive change in a specific environment, particularly the educational setting (Spencer Clark et al., 2020).



Action research allows educational practitioners and professionals to examine and improve their pedagogy and practice through deliberate, substantial, and critical reflection. Unlike abstract theories or self-contained discoveries, action research emerges from educators' experiences managing challenges and achievements within the classroom, school, and community (McNiff, 2017). This design acknowledges the contextual nature of educational practice and promotes practical, real-world solutions. The decision to use action research was driven by its ability to facilitate active interaction and collaboration between the researcher and participants, fostering engagement and promoting sustainable change. This collaborative approach ensures the proposed solutions are relevant, practical, and grounded in the educational context.

The study employed a mixed-methods approach, incorporating both quantitative and qualitative components to achieve a more comprehensive understanding of the research topic. The quantitative component involved the administration of a self-assessment questionnaire, which collected numerical data for statistical analysis. The questionnaire was designed to gather information on specific variables related to the research topic, such as participants' perceptions, attitudes, or behaviors. Using a researcher-made questionnaire ensured consistency in data collection, enabling comparisons and generalizations.

In addition, the qualitative component of the study included interviews and focus groups. Interviews allowed for in-depth exploration of individual experiences, opinions, and subjective interpretations, while focus groups facilitated interactive discussions and exploration of shared experiences and group dynamics. Including both quantitative and qualitative methods, the study aimed to provide a comprehensive understanding of the research topic. Quantitative data provided numerical insights and statistical analysis, offering a broader overview and allowing for generalizability. On the other hand, qualitative data offered rich contextual information, capturing the nuances and complexities of participants' experiences and viewpoints.

An exploratory sequential method, a mixed-methods design, was chosen to leverage the strengths of both quantitative and qualitative approaches. This approach facilitated the gathering of diverse data sources, enhancing the validity and reliability of the findings. By integrating quantitative and qualitative data, the study employed triangulation and cross-validation techniques, enabling a more nuanced interpretation of the research outcomes.

Participants

This research employed a convenience sampling method to select a sample of 44 voluntary fourth-year graduating nursing students from Riverside College, Inc. The students were enrolled in the second semester of the Academic Year 2022-2023. The decision to focus on fourth-year students was based on their advanced stage in nursing education, nearing program completion, and imminent transition to professional nursing practice. By targeting this crucial stage, the study aimed to examine the effectiveness of the intervention in a context relevant to the participants' educational journey.

Including the fourth-year nursing students ensured that the findings directly related to their specific educational context at Riverside College, Inc. This allowed for insights that could be generalized to the college's broader population of nursing students. Additionally, selecting participants who had already acquired a foundation of theoretical nursing knowledge provided a solid basis for evaluating the impact of the intervention.

The sample of students was diverse regarding their backgrounds, experiences, and perspectives. This diversity added richness and depth to the data collected, enabling a comprehensive analysis of the intervention's effects on FDAR nursing documentation practices. While the findings of this study may have implications for similar nursing programs, it is essential to exercise caution when generalizing the results to other contexts. Variations in curriculum, teaching methods, and student characteristics across different institutions may influence the outcomes and limit the generalizability of the findings.

Instrumentation

A researcher-developed self-assessment questionnaire was designed to evaluate the students' FDAR nursing documentation practices. This tool was developed based on the National Nursing core competency standards for nursing documentation and the Republic Act 9173, which encompassed five key categories: Timeliness and Completeness, Clarity and Accuracy, Privacy and Confidentiality, Legal and Ethical Considerations, and Reflective and Evaluative Nursing Documentation.

Content validity is crucial in instrument construction as it ensures the accurate representation of the assessed content domain (Good & Scates, 1972). The researcher-developed instrument in this study exhibited strong content validity; most criteria have a CVI of 1, indicating unanimous agreement on their relevance. Some criteria have a CVI below 1 but still show good agreement among panelists. Most criteria have a CVR of 1, indicating unanimous agreement on their essentiality. Some criteria have a CVR below 1, indicating panelist rating



variability(Nikolopoulou, 2022). Additionally, the instrument demonstrated high internal consistency and reliability, as indicated by a Cronbach's alpha coefficient of approximately 0.999 or 1 (Glen, 2023).

The questionnaire was administered using Microsoft Forms, an electronic platform facilitating data collection. It comprised items specifically designed to assess the students' proficiency in each component of the FDAR documentation format. By utilizing this researcher-made tool, the study aimed to gather comprehensive insights into the students' self-perceived adherence to the established standards and identify areas for improvement in their nursing documentation practices.

Interview and focus group guides were meticulously developed to gain a comprehensive understanding of the students' experiences and perceptions and explore the effectiveness of the case-based approach on their documentation practices. These guides served as structured frameworks for conducting qualitative data collection. The interview guide consisted of open-ended questions encouraging participants to provide detailed and nuanced responses. The open-ended questions aimed to delve deeply into the participants' thoughts, emotions, and perspectives, allowing for a rich exploration of their experiences with the case-based approach and its influence on their documentation practices.

Similarly, the focus group guide was carefully crafted to facilitate meaningful participant discussions. It included thought-provoking questions designed to elicit diverse viewpoints and encourage participants to share their insights, challenges, and successes related to the case-based approach and its impact on their documentation practices.

Procedure/Data Collection:

The questionnaires and FGDs involved selected fourth-year Nursing Students.

Pre-Intervention Data

Before the implementation of the case-based approach, the participants completed the Self-Assessment Tool for Nursing Documentation Practices questionnaire, providing baseline data on their documentation practices.

Intervention

The researcher took the initiative to implement the case-based approach within the fourth-year nursing curriculum. The researcher identified and integrated the case-based approach, particularly emphasizing documentation practices. With great care and attention, the researcher developed real-life scenarios that were thoughtfully aligned with the learning objectives and content of the curriculum. These scenarios were meticulously crafted to challenge students' critical thinking abilities and encourage the practical application of their theoretical knowledge within the context of documentation practices.

Upon completion of scenario development, the researcher introduced the case-based approach to the students, emphasizing its importance as an integral part of their learning experience. The scenarios were presented, and the students were actively encouraged to engage in analysis, discussion, and the application of their theoretical knowledge to address the documentation challenges portrayed in each case effectively.

As a facilitator, the researcher guided the students through engaging discussions, offering support, clarification, and valuable feedback to foster their understanding and critical thinking skills related to documentation practices. The researcher organized structured reflection and debriefing sessions after the students' interaction with the scenarios.

These sessions provided a dedicated space for students to reflect on their decision-making processes, share insights, and critically analyze their documentation practices within the context of the case-based approach.

To evaluate the student's comprehension and application of documentation practices within the case-based approach, the researcher designed assessments that required them to create FDAR nursing documentation. This assessment method was tailored to assess the student's ability to document patient care based on the scenarios presented effectively. By spearheading the implementation of the case-based approach, the researcher aimed to bridge the gap between theoretical knowledge and practical application, enhance students' critical thinking abilities, and improve their competence in nursing documentation practices.

Post-Intervention Data

Following the intervention, the participants completed the same Self-Assessment Tool for Nursing Documentation Practices questionnaire to assess any changes or improvements in their documentation practices. Qualitative data

were collected through individual interviews and focus groups with selected participants. These sessions explored the students' experiences, perceptions, and the effectiveness of the case-based approach on their documentation practices. The interviews and focus groups were audio-recorded and transcribed for further analysis.

Data Analysis

The data collected in this research study encompassed qualitative and quantitative data, allowing for a comprehensive analysis of the research questions. The qualitative data, obtained through interviews and focus groups with fourth-year nursing students, were analyzed using thematic analysis. Thematic analysis is a widely used approach for identifying patterns, themes, and insights within qualitative data (Braun & Clarke, 2022). The researcher utilized Colaizzi's (1978) method of thematic analysis. The transcripts were coded and categorized into themes and sub-themes to capture the students' experiences, perceptions, and exploration of the case-based approach in improving FDAR nursing documentation practices. The process starts with immersing oneself in the obtained data to gain an in-depth comprehension. Important statements encapsulating the participants' experiences were subsequently pinpointed. The researcher deduced explicit or implicit meanings from these statements through examination and contemplation. The devised meanings were then grouped into themes or classifications with shared attributes. Similarities and links between meanings were discovered, giving rise to overarching patterns. The researcher then generated extensive explanations for each theme, guaranteeing a complete portrayal of the subject under investigation. These accounts encompass all pertinent aspects associated with the theme. These individual accounts are combined to form a cohesive structure representing the subject matter's core features. This structure incorporates all recognized themes and their interconnections. In conclusion, the outcomes were corroborated. The researcher conferred with participants to confirm the accuracy and pertinence of the determined themes and configurations, ensuring the dependability and validity of the assessment.

On the other hand, the quantitative data obtained from the self-assessment questionnaire were analyzed using appropriate statistical techniques. Descriptive statistics, such as mean scores, were calculated to determine the level of performance on FDAR nursing documentation practices before and after the intervention. Additionally, inferential statistics, specifically paired samples t-tests, were conducted to examine the significant differences between pre-and post-test scores. The paired samples t-test allowed for comparing mean scores before and after the intervention, providing insights into the effectiveness of the case-based approach in improving nursing documentation practices among fourth-year nursing students.

A more comprehensive understanding of the research problem was achieved by employing both qualitative and quantitative data analysis approaches. The qualitative analysis provided rich insights into the students' experiences and perceptions, while the quantitative analysis offered numerical evidence of the effectiveness of the case-based approach. This combination of methods enabled a robust and multifaceted examination of the research questions, enhancing the overall validity and reliability of the findings.

Ethical Consideration

Ethical considerations were prioritized throughout the research process. Informed consent was obtained from each participant, highlighting their voluntary participation in the study. Participants were made aware of the purpose of the research, the confidentiality of their responses, and the anonymity of their identities. Respecting and protecting the rights and privacy of the participants was a fundamental aspect of this research.

Results and Discussion:

Table 1
Level of performance on FDAR nursing documentation practices among fourth year nursing students grouped according to Age

Variable	Mean	SD
Age (Before)		
21-22 years old	3.37	0.58
23 and above	3.49	0.75
Total	3.42	0.65
Age (After)		
21-22 years old	4.81	0.39
23 and above	4.65	0.36
Total	4.75	0.38

Table 1 presents the mean scores for different age groups before and after the intervention.

Before the intervention, the mean score for the 21-22 age group was 3.37, while for the 23 and above group, it was 3.49. The overall mean score for all participants before the intervention was 3.42, indicating the level of performance on FDAR nursing documentation practices before implementing the case-based approach.

After the intervention, the mean score for the 21-22 age group increased to 4.81; for the 23 and above group, it increased to 4.65. The overall mean score for all participants after the intervention was 4.75. These scores suggested a significant improvement in performance on FDAR nursing documentation practices following implementing of the case-based approach, supporting the findings of Azrimaidaliza et al. (2022) and Krain (2016). The literature indicated that case-based methods enhanced students' performance and critical thinking skills.

The results in Table 1 demonstrated that the case-based approach positively impacted the performance of fourth-year nursing students in terms of FDAR nursing documentation practices. Statistically, the increase in mean scores after the intervention improved their ability to document nursing practices effectively. This finding aligned with the literature, which suggested that the case-based method significantly improved students' performance and critical thinking skills (Azrimaidaliza et al., 2022; Krain, 2016).

The observed improvement in performance could be attributed to the nature of the case-based approach, which allowed students to engage actively in problem-solving activities and apply theoretical concepts to real-life scenarios. By analyzing and discussing case studies, students developed a deeper understanding of nursing documentation practices and enhanced their critical thinking abilities. This active learning approach likely contributed to the significant increase in mean scores.

Furthermore, the results suggested that the case-based approach was practical across different age groups. The 21-22 years old and 23 and above groups substantially improved their FDAR nursing documentation practices. This finding indicated that the case-based method was applicable and beneficial for students at various stages of their nursing education.

Table 2
Level of performance on FDAR nursing documentation practices among fourth year nursing students grouped according to Gender

Variable	Mean	SD
Gender (Before)		
Male	3.57	0.50
Female	3.31	0.68
LGBTQA+	3.93	0.64
Total	3.42	0.65
Gender (After)		
Male	4.72	0.31
Female	4.76	0.43
LGBTQA+	4.87	0.14
Total	4.75	0.39

Table 2 examined the mean scores for different gender groups before and after the intervention.

Before the intervention, the mean score for male students was 3.57; for female students, it was 3.31; and for LGBTQ+ students, it was 3.93. The overall mean score for all participants before the intervention was 3.42.

After the intervention, the mean score for male students increased to 4.72; for female students, it increased to 4.76; and for LGBTQ+ students, it increased to 4.87. The overall mean score for all participants after the intervention was 4.75. These findings supported the literature by Tran and Thai (2023), which indicated that the case-based approach improved students' critical thinking, problem-solving, and communication abilities. The literature also suggested that case-based learning enhanced students' confidence and enthusiasm in engaging with others, including intercultural competency.

The results in Table 2 demonstrated the positive impact of the case-based approach on students' FDAR nursing documentation practices across different gender groups. Before the intervention, female students had slightly lower mean scores compared to male students, while LGBTQ+ students had a higher mean score. However, after the intervention, all groups showed significant improvements in their mean scores, indicating that the case-based approach was practical regardless of gender. The findings in Table 2 aligned with the literature, which suggested that the case-based approach enhanced critical thinking, problem-solving, and communication abilities (Tran & Thai, 2023).

**Table 3**

Level of performance on FDAR nursing documentation practices among fourth year nursing students grouped according to the Number of Clinical Exposure

Variable	Mean	SD
Number of Clinical Exposure (Before)		
(7) Rotations	3.60	0.49
(8) Rotations	3.32	0.71
Total	3.42	0.65
Number of Clinical Exposure (After)		
(7) Rotations	4.69	0.29
(8) Rotations	4.79	0.43
Total	4.75	0.39

Table 3 presented the mean scores for students with different numbers of clinical rotations before and after the intervention.

Before the intervention, students with seven (7) rotations had a mean score of 3.60, while students with eight (8) rotations had a mean score of 3.32. The overall mean score for all participants before the intervention was 3.42.

After the intervention, students with seven (7) rotations showed an increase in mean score to 4.69, and students with eight (8) rotations demonstrated an increase to 4.79. The overall mean score for all participants after the intervention was 4.75. These results indicated that the case-based approach positively improved FDAR nursing documentation practices for students with different numbers of clinical rotations.

The findings in Table 3 suggested that the case-based approach effectively improved the performance of fourth-year nursing students in FDAR nursing documentation practices, regardless of the number of clinical rotations they had completed. Students with seven (7) and eight (8) rotations significantly improved their mean scores after the intervention.

This finding was consistent with the literature, highlighting the benefits of case-based learning in enhancing nursing students' performance and engagement (Bi et al., 2019). The case-based approach allowed students to apply their theoretical knowledge in practical scenarios, promoting a deeper understanding of nursing documentation practices.

Table 4

Significant difference in the pre- and post-test scores of fourth-year nursing students' FDAR nursing documentation practices following the implementation of a case-based approach

	Mean	t value	df	P- Value	Conclusion
Before	3.42	-11.120	43	0.000	Significant
After	4.75				

Table 4 presents the analysis of pre- and post-test scores using a paired samples t-test to determine the impact of the intervention on FDAR nursing documentation practices.

Table 4 presented the results of the paired samples t-test to determine the significant difference in pre-and post-test scores of fourth-year nursing students' FDAR nursing documentation practices following the implementation of the case-based approach.

The pre-test mean score was 3.42, and the post-test mean score was 4.75. The paired samples t-test revealed a significant difference between the pre-and post-test scores ($t = -11.120$, $df = 43$, $p < 0.001$). After implementing the case-based approach, this indicated a statistically significant improvement in FDAR nursing documentation practices.

The results in Table 4 contradicted the hypothesis and demonstrated that implementing the case-based approach significantly improved fourth-year nursing students' FDAR nursing documentation practices. The paired samples t-test revealed a statistically significant difference between the pre-and post-test scores, providing evidence of improvement following the intervention.

These findings align with existing literature that emphasizes the effectiveness of case-based learning in enhancing student problem-solving abilities and satisfaction (Bi et al., 2019). The case-based approach facilitated active

engagement, applying knowledge to real-life scenarios, and developing critical thinking skills, contributing to the observed improvement in FDAR nursing documentation practices.

The significant difference in pre-and post-test scores highlights the impact of the case-based approach on enhancing fourth-year nursing students' ability to document patient care effectively. Students could integrate theoretical knowledge with practical application by engaging with realistic case scenarios, resulting in improved understanding and proficiency in FDAR nursing documentation practices.

These findings support the growing body of evidence that underscores the benefits of case-based learning in nursing education. The case-based approach enables students to contextualize their learning, apply critical thinking skills, and develop a deeper understanding of nursing concepts and practices (Azrimaidaliza et al., 2022; Krain, 2016). The positive outcomes observed in this study further emphasize the potential of case-based learning as an effective instructional method for enhancing nursing students' documentation practices.

Qualitative Analysis

Table 1 Summary of the thematic analysis of Case-based approach to improve FDAR Nursing Documentation practices among fourth-year nursing students

Theme	Subtheme
Advantages of the Case-Based Approach	Active Learning, Visualization, and Participation
	Practical Application
Concerns and Challenges in Implementing the Case-Based Approach	Time Constraints
	Availability of Clinical Instructors
Feasibility of Implementing the Case-Based Approach	Enhanced Learning and Critical Thinking
	Suitable for Large Class Sizes
	Team-Based Improvement
Recommendations for Improving the Case-Based Approach	Guided Practice
	Early Implementation and Strengthening Foundation
Impact of Improved FDAR Nursing Documentation Practices	Patient Care and Safety
	Confidence and Professionalism

The results and discussions were triangulated from both quantitative and qualitative analyses. This study provides valuable insights into the effectiveness of using a case-based approach in improving fourth-year nursing students' FDAR documentation practices. The quantitative analysis demonstrated that the case-based approach significantly improved mean scores across age groups, gender groups, and clinical rotations. The active learning approach facilitated by the case-based method likely contributed to these observed improvements. The qualitative analysis revealed that engaging with real-life cases allowed participants to understand nursing practices better and improve their ability to categorize and prioritize patient needs. Participants also acquired practical skills in making informed intervention decisions by analyzing case scenarios using FDAR documentation practices within this methodology. These findings align with existing literature emphasizing the benefits of case-based learning in enhancing problem-solving abilities, critical thinking skills, and overall satisfaction among learners (Bi et al., 2019; Rosier, 2022). However, challenges related to time constraints and the availability of clinical instructors need adequate support/resources for optimal utilization for effective implementation (Jones et al., 2022). Integrating this strategy into curriculum objectives aligned coherently between different teaching strategies is crucial for seamless incorporation & alignment with educational goals, thus promoting a comprehensive learning experience (Kantar & Sallian, 2018). These findings suggest that incorporating a case-based approach can improve nursing education outcomes by promoting active engagement/participation while developing practical application/critical thinking skills among learners.

Conclusion:

This study contributes to the existing literature on the benefits of case-based learning in nursing education and provides valuable insights into the effectiveness of a case-based approach in improving fourth-year nursing students' FDAR nursing documentation practices. The findings from this study align with previous research that emphasizes the positive effects of case-based methods on students' performance, critical thinking skills, and engagement in nursing education.

The quantitative analysis revealed significant improvements in mean scores for different age groups, gender groups, and the number of clinical rotations after implementing the case-based approach. These findings are consistent with previous studies highlighting the effectiveness of case-based learning in enhancing students' performance and critical thinking skills (Azrimaidaliza et al., 2022; Krain, 2016). The active learning and practical application facilitated by the case-based approach likely contributed to the improvements.



The qualitative analysis provided insights into the advantages of the case-based approach reported by fourth-year nursing students. Active learning, visualization, and participation were crucial factors that enhanced students' understanding of nursing practices and improved their ability to categorize and prioritize patient needs. These findings align with existing literature that emphasizes the benefits of case-based learning in nursing education (Tran & Thai, 2023).

However, the study also identified time constraints and the availability of clinical instructors as challenges in implementing the case-based approach, consistent with previous research (Jones et al., 2022). Addressing these challenges and providing additional support and resources for comprehensive engagement beyond allocated clinical practice time frames are crucial for the optimal implementing of the case-based approach.

In conclusion, the findings of this study support the effectiveness of the case-based approach in improving fourth-year nursing students' FDAR nursing documentation practices. Integrating active learning, critical thinking, and practical application in the case-based approach aligns with the goals of nursing education. Educators can utilize these findings to design instructional strategies that enhance student engagement, critical thinking, and overall performance in nursing documentation practices.

Further research could explore the long-term effects of the case-based approach and investigate additional strategies to overcome implementation challenges in nursing education. By continuing to explore and refine pedagogical approaches, nursing education can continuously evolve to meet the changing demands of healthcare and ensure that nursing students are well-prepared to provide high-quality patient care.

Recommendations:

Based on the findings of this research, several recommendations can be made to enhance the case-based approach and its implementation in nursing education:

1. Collaboration and feedback: Foster collaborative efforts between students and clinical instructors to improve the case-based approach continuously. Regular feedback sessions can provide valuable insights into the approach's effectiveness and help identify areas for refinement.
2. Guided practice: Provide structured guidance and support from clinical instructors during case-based activities. Clear instructions, checklists, and rubrics can help students develop the necessary skills and enhance their understanding of FDAR nursing documentation practices.
3. Early implementation: Introduce the case-based approach earlier in the nursing curriculum to provide students with a solid foundation in documentation practices. Starting early in the nursing program will allow students to progressively build their knowledge and skills, leading to better mastery of FDAR documentation throughout their nursing education.
4. Time management: Allocate dedicated time for case-based activities, discussions, and analysis to address students' concerns about time constraints. Creating a structured schedule incorporating case-based learning activities into the curriculum will ensure that students have sufficient time to engage in meaningful learning experiences.
5. Faculty development: Offer training and professional development opportunities for clinical instructors to familiarize them with the case-based approach and effective teaching strategies. Faculty who are well-prepared and knowledgeable about the approach will be better equipped to guide and support students effectively.
6. Continuous evaluation: Continuously assess the impact of the case-based approach on nursing documentation practices and student learning outcomes. Regular evaluations help identify areas for improvement and ensure that the approach remains practical and relevant over time.

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