PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

Enhancing Nursing Students' Knowledge in Emergency Stroke Care through Video-Based Learning

Indah Dwi Astuti[a]*
[a] Department of Nursing, Faletehan University
*Corresponding Author: syima.indahdwi@gmail.com

ARTICLE INFORMATION

Article history
Received (4 January 2026)
Revised (19 January 2026)
Accepted (19 January 2026)

Keywords
video-based learning, stroke, emergency care, nursing students

ABSTRACT

Introduction: *Stroke is an emergency condition that requires rapid and appropriate management. Nursing students' understanding of stroke emergency care is essential to support clinical competence. However, evaluation results indicate that students' comprehension is still limited. Video-based learning media is one of the innovations to improve learning effectiveness. The purpose this research was to examine the effect of video-based learning on improving students' understanding of emergency nursing care in stroke.*
Methods: *This study employed a pre-experimental one group pretest-posttest design. A total of 39 nursing students were recruited using total sampling. The instrument was a knowledge test, and data were analyzed using the Paired T test Signed Rank Test*
Results: *The results this research showed that the mean pretest score was 82.72, which increased to 92.03 in the posttest. The Paired T test test showed a significant difference between pretest and posttest scores with p value = 0.000 (< 0.05).*
Conclusions: *Video-based learning is effective in enhancing students' understanding of stroke emergency nursing care. Video can be recommended as an innovative medium in nursing education to improve students' learning outcomes*

Introduction

Stroke is a medical emergency that requires rapid, accurate, and coordinated management. Untreated or poorly managed stroke can result in permanent disability or death. Therefore, nursing students, as future healthcare providers, must acquire a comprehensive understanding of emergency stroke care to develop clinical competence. However, studies and classroom observations show that many students struggle with fundamental concepts of stroke emergencies, reflected in suboptimal exam scores and limited ability to analyze clinical cases (Ministry of Health RI, 2019; Potter et al., 2017).

Each year, over 12 million people worldwide experience their first stroke, leading to an estimated 6.5 million deaths. More than 100 million individuals are currently living with the consequences of stroke. While the risk of stroke rises with age, a substantial proportion affects younger populations, with over 60% of cases occurring in individuals below 70 years of age and 16% in those under 50, highlighting the significant impact of stroke on the productive age group. In Indonesia, stroke imposes a substantial financial burden on Indonesia's National Health Insurance (JKN) system, with over 3.5 million cases recorded.

Given the substantial clinical and economic burden of stroke, early recognition and timely emergency management are critical determinants of patient outcomes, with delays in diagnosis

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

and treatment contributing to prolonged disability, worse neurological outcomes, and increased healthcare resource utilization (Alkuwaiti et al., 2025; Kadhim et al., 2022). Nurses frequently serve as the first point of contact in emergency care settings and are essential in rapidly identifying stroke symptoms and activating acute care pathways (Alkuwaiti et al., 2025). However, evidence suggests that many healthcare professionals, including nurses, demonstrate significant gaps in stroke knowledge and recognition skills, underscoring the need for improved education and training to adequately prepare nursing students and emergency personnel for real-world clinical demands (Rossis et al., 2024).

Previous research indicates that nursing students' knowledge of stroke emergency management remains low. Among third- and fourth-year nursing students, 63.9% demonstrated insufficient knowledge, suggesting that conventional teaching methods may not fully enhance understanding. This knowledge gap was not influenced by sociodemographic factors, such as gender, education level, or marital status, implying that teaching methods are the primary determinant of knowledge acquisition (Kadhim et al., 2022).

There are many learning methods that can be used to enhance students' knowledge, such as traditional lectures, printed modules, and simulation-based learning. However, these methods show limitations in terms of engagement, flexibility, and resource intensity. Findings from previous studies indicate that video-based learning methods are more effective than traditional lecture-based approaches, and that e-learning can be implemented as an important adjunct to conventional teaching methods (Blackwood et al., 2025; Putri et al., 2025) .

As a solution to this issue, the use of technology-enhanced learning, such as educational videos, significantly increases public knowledge of stroke risk factors, warning signs, and preventive measures. For example, a community-based study in Lebanon found that participants' stroke knowledge scores improved significantly after a targeted video intervention (Safwan et al., 2024). The study found that video-based learning increased student engagement, encouraged active participation, and supported a student-centered approach. It suggests that using video content in medical education can improve understanding, knowledge retention, and independent learning (Gutiérrez-González et al., 2024). Video-assisted learning is preferred by students when acquiring new fundamental skills and enhances their learning process as well as their level of preparedness in psychomotor-based nursing education (Fatimah et al., 2024).

Various educational strategies have been used to improve learning outcomes in emergency nursing education, including traditional lectures, problem-based learning, simulation-based training, and technology-enhanced learning. Scenario-based simulation significantly improves nursing students' professional knowledge and clinical practice abilities compared to traditional teaching methods (Alharbi et al., 2024; Zhao et al., 2024). Problem-based learning supports clinical reasoning; however, its effectiveness depends heavily on facilitation quality and may be less suitable for time-critical and visually complex conditions such as acute stroke (Yang & Oh, 2023).

In contrast, technology-enhanced learning, particularly video-based learning, has shown effectiveness in improving stroke-related knowledge and learner engagement. A community-based study demonstrated significant improvements in stroke knowledge following a targeted video intervention (Safwan et al., 2024), while other studies report that video-based learning enhances engagement, knowledge retention, and self-directed learning in health education (Gutiérrez-González et al., 2024). Nevertheless, evidence examining the effectiveness of video-based learning specifically in emergency stroke nursing education remains limited, highlighting a gap in the existing literature. These findings align with Mayer's cognitive theory of multimedia learning, which suggests that combining visual and auditory input enhances cognitive processing (Mayer, 2009).

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

This study aims to investigate the effect of video-based learning on nursing students' understanding of emergency stroke care. The approach allows for comparison of knowledge before and after the intervention, enabling the measurement of knowledge gains (Sugiyono, 2019). The video content focuses on core aspects of emergency stroke nursing care, including recognition of signs and symptoms, principles of emergency management, and initial nursing interventions. These are essential competencies for producing graduates proficient in emergency care, in line with the program's vision and mission. Video-based learning is expected to foster independent study, enhance motivation, and strengthen conceptual understanding. The objective of this study is to evaluate whether such interventions improve nursing students' comprehension of emergency stroke care.

Methods

This type of research is quantitative, using an experimental design. Specifically, a pre-experimental, one-group pretest-posttest approach was employed to examine the effect of video-based learning on nursing students' understanding of emergency stroke care. The population consisted of sixth-semester nursing students enrolled in Emergency Nursing II, with a total sample of 220 participants. This study employed a total sampling technique, involving all sixth-semester nursing students enrolled in the Emergency Nursing II course. The study was conducted in July 2025.

Data were collected using a structured quiz administered before and after the intervention to assess students' knowledge of stroke emergencies. Retrospective validity and reliability testing was conducted using pretest data, with item validity assessed through corrected item–total correlation and internal consistency evaluated using Cronbach's alpha ($\alpha = 0.82$). The video content covered definitions, pathophysiology of ischemic and hemorrhagic stroke emergencies, clinical manifestations, primary and secondary assessments, and emergency nursing interventions for stroke cases.

The intervention consisted of structured video-based learning sessions, designed to provide visual and auditory explanations of key concepts. Students were instructed to watch the videos independently, with opportunities to review and discuss the content as needed. Data were analyzed using a paired-sample t-test to compare pretest and posttest scores. Statistical significance was set at $p < 0.05$, and results were reported as mean scores with ranges to demonstrate knowledge improvement after the intervention.

Results

1. Respondent Characteristics

Table 1. The Characteristics of research respondents

Respondent Characteristics	***Frequency (n)***	***Percentage (%)***
Gender		
Male	56	28
Female	144	72
Semester		
6	200	100
7	0	0
8	0	0
Year of study		
First-year	0	0
Second-year	0	0
Third-Year	200	100
Fourth-year	0	0

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

Respondent Characteristics	*Frequency (n)*	*Percentage (%)*
Age		
16-20	7	3,5
21-25	193	96,5
25-30	0	0

Based on the table 1, the results show that most respondents are aged 21-25 years (96,5%) and female (72%). All participants were sixth-semester nursing students, and none had previously repeated the Emergency Nursing II course.

2. Pretest Knowledge Scores of Respondents

Table 2. Pretest Knowledge Scores of Respondents

	Frequency (n)	*Mean*	*Min*	*Max*
Pretest	200	85,6	28	100

Table 2 presented the distribution of respondents' knowledge scores before the intervention. A total of 200 respondents participated in the pretest. The mean pretest knowledge score was 85.6, with scores ranging from a minimum of 28 to a maximum of 100. These findings indicated that respondents' baseline knowledge levels varied widely prior to the intervention.

3. Posttest Knowledge Scores of Respondents

Table 3. Posttest Knowledge Scores of Respondents

	Frequency (n)	*Mean*	*Min*	*Max*
Posttest	200	95,7	44	100

In the posttest, the respondents' knowledge scores after the intervention. All 200 respondents completed the posttest, and the mean knowledge score was 95.7. The posttest scores ranged from 44 to 100, indicating an overall improvement in knowledge following the intervention.

4. Comparison of Pretest and Posttest Knowledge Scores of Respondents

Table 4. Comparison of Pretest and Posttest Knowledge Scores of Respondents

	Frequency (n)	*Mean*	**p *value***
Pretest	200	85,6	0.000
Postest	200	95,7	

Statistical analysis using a paired t-test showed a p-value < 0.001, indicating a significant effect of the intervention. These findings indicate that video-based learning positively influenced students' understanding of emergency stroke care

Discussion

1. Respondent Characteristics

All participants were sixth-semester nursing students, and none had previously repeated the Emergency Nursing II course. Video-based learning has been widely reported as an effective instructional strategy in health and nursing education, particularly for delivering complex and time-sensitive clinical content. The use of video allows learners to control the pace of learning, review procedures repeatedly, and integrate visual and auditory information, which supports deeper understanding and skill acquisition. Consequently, educational videos have been

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

incorporated into face-to-face, blended, and online learning models to enhance student engagement and comprehension of clinical material (Navarrete et al., 2025; Guo, 2014).

However, studies specifically examining the influence of students' year of study on the effectiveness of video-based learning remain scarce. In the present study, all participants were fourth-year nursing students, which minimized differences in baseline knowledge and clinical exposure. This homogeneity strengthens the internal validity of the findings, suggesting that the observed improvement in knowledge is more likely attributable to the video-based intervention rather than variations in academic level. (Schmid et al., 2014).

The study population consisted exclusively of third-year students (sixth-semester), resulting in a relatively homogeneous age distribution. As a consequence, age-related differences were unlikely to influence the study outcomes. Although both male and female students participated, the present study was not intended to assess gender-based differences. Accordingly, the improvement in knowledge scores observed after the intervention is more plausibly associated with the learning strategy implemented rather than with demographic characteristics such as age or gender. The relative homogeneity of the respondents may therefore be considered an advantage, as it helps to minimize the potential influence of demographic confounding variables and strengthens the internal validity of the findings (Brame, 2016).

2. Pretest Knowledge Scores of Respondents

The pretest results reflected respondents' baseline knowledge prior to the intervention. The mean pretest score was 85.6, with a wide range of scores from 28 to 100. This variation indicated that respondents entered the learning process with differing levels of prior knowledge. Such differences may have been influenced by individual learning experiences, previous exposure to the subject matter, and variations in students' engagement during earlier learning activities.

The relatively low minimum score in the pretest indicated that a subset of students had limited foundational knowledge prior to the intervention, which may have hindered their ability to fully engage with the course content. Research has shown that blended learning and multimedia approaches support more equitable knowledge distribution by accommodating diverse learning strategies and starting competencies among students (Abusabeib, 2025). Identifying such gaps through pretest assessments was essential to tailor instructional support and justify the use of supplemental learning tools, such as videos or online modules, which have been suggested to enhance initial engagement and understanding in nursing education.

3. Posttest Knowledge Scores of Respondents

In the posttest, the mean knowledge score in the posttest was 95,7, with ranged from 44 to 100. This score indicated that not only improved average achievement but also reduced disparities in learning outcomes. This improvement suggested that the intervention had a significant positive impact on respondents' knowledge acquisition.

This significant improvement aligns with evidence from previous quasi-experimental and pretest–posttest studies in health education, which demonstrate that video interventions can lead to marked increases in participants' knowledge outcomes. For example, a quasi-experimental study on the use of video learning in nursing education found that video strategies significantly improved both knowledge and clinical skill scores compared to traditional lecture methods among nursing students(Sari & Sundari, 2021). Furthermore, systematic evidence indicates that blended learning in nursing education positively influences cognitive outcomes, including knowledge and critical thinking abilities (Wong et al., 2023). In conclusion, the average knowledge scores increased after the intervention, supporting the effectiveness of the learning intervention in enhancing students' knowledge

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

4. Comparison of Pretest and Posttest Knowledge Scores of Respondents

Statistical analysis indicated a significant effect of the intervention. These findings indicate that video-based learning positively influenced students' understanding of emergency stroke care. The primary advantage of video content lies in its ability to present learning material visually, systematically, and engagingly. With an audio-visual format, students can more easily understand the pathophysiology, clinical signs, and initial management steps of stroke patients compared to text-based or lecture-based learning. This finding is consistent with previous studies reporting that educational videos effectively increase public awareness and knowledge of stroke (Safwan et al., 2024) and are more effective than conventional online methods in enhancing students' understanding and academic achievements (Gutiérrez-González et al., 2024; Kusumawati, 2023). Furthermore, according to dual coding and multimedia learning theories (Mayer, 2009), presenting information through both words and images facilitates cognitive processing by engaging two channels simultaneously. As a result, students not only retain factual information but also relate the concepts learned to real clinical practice.

Statistical analysis using a paired-sample t-test revealed a significance value of $p < 0.05$, indicating a meaningful difference between students' knowledge scores before and after the video-based learning intervention. These results suggest that the video content used in this study positively influenced students' knowledge of stroke emergencies. These findings are in line with the study conducted by Afni et al. (2025), which reported a significance value of 0.000 ($p < 0.05$), indicating a significant difference in knowledge and skill retention after students received either self-directed video learning or demonstration-based instruction. The study concluded that both video-based and demonstration-based interventions significantly enhanced nursing students' knowledge and skills, particularly in emergency care topics.

The significant improvement in knowledge scores observed in this study can be explained by the video medium's ability to provide simultaneous visual and auditory information, facilitating comprehension and retention. This is consistent with prior research indicating that video-based learning effectively improves knowledge retention, although demonstration methods with direct instructor feedback may yield slightly higher retention outcomes. Other studies utilizing interactive video in health education have also demonstrated significant improvements in both knowledge and skills among students. Additionally, research on nursing students has shown that video media improves the understanding of emergency care concepts more effectively than conventional learning methods (Anggraini et al., 2025; Miri et al., 2024).

The implementation of blended video-based learning was shown to increase students' satisfaction, learning self-confidence, and academic performance, particularly among time-constrained students working full time in hospital settings (Wong et al., 2023). Similarly, Sari & Sundari (2021) reported that using video as a learning strategy significantly improved nursing students' knowledge and clinical skills, while Yang & Oh (2023) found that video-assisted problem-based learning further enhanced motivation and promoted self-directed learning, indicating that video-based approaches can effectively strengthen both competency and engagement in nursing education. These findings align with previous research showing that technology-based learning media positively influence students' academic performance. Such studies reported that various learning variables significantly affect academic achievement, regardless of students' geographic backgrounds, whether urban or rural (Ali & Baig, 2022).

Overall, the results of this study are consistent with previous findings indicating an increase in students' knowledge after receiving video-based learning interventions. Prior studies reported higher mean post-test scores compared to pre-test scores, demonstrating that video-assisted learning is effective in enhancing students' comprehension of stroke emergency care. This effectiveness is attributed to the simultaneous presentation of information in visual and auditory

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

formats, helping students understand concepts, management procedures, and emergency aspects of stroke more clearly and systematically (Shukla, 2024).

These findings suggest that video content can serve as a relevant alternative learning strategy in nursing education, particularly for emergency care topics. This medium not only improves students' understanding but also promotes motivation and active engagement in the learning process.

Conclusion

Video-based learning has been proven effective in enhancing nursing students' understanding of emergency stroke care. This is evidenced by the significant difference between pretest and posttest scores. Therefore, video content can be considered an innovative alternative learning strategy to improve nursing students' learning outcomes.

Acknowledgments

Author sincerely thanks everyone who contributed to the completion of this study.

References

Abusabeib, Z. A. (2025). Blended Learning in Bachelor's Nursing Education: Exploring Student Experiences, Satisfaction, and Knowledge. *Advances in Medical Education and Practice*, *16*, 1197–1207. https://doi.org/10.2147/AMEP.S520500

Afni, A. C. N., Rosida, N. A., Saputro, S. D., & Barros, C. (2025). Evaluation of Knowledge and Skill Retention by Self-Directed Video Learning and Demonstration on Basic Life Support among First-Year Nursing Students. *Malaysian Journal of Nursing*, *17*, 248–258. https://doi.org/10.31674/mjn.2025.v17i02.024

Alharbi, A., Nurfianti, A., Mullen, R. F., McClure, J. D., & Miller, W. H. (2024). The effectiveness of simulation-based learning (SBL) on students' knowledge and skills in nursing programs: a systematic review. *BMC Medical Education*, *24*(1). https://doi.org/10.1186/s12909-024-06080-z

Ali, B., & Baig, F. (2022). The Impact Of Educational Videos On The Academic Performance Of University Students In Distance Learning. *Journal of Positive School Psychology*, *2022*(12), 1233–1249. http://journalppw.com

Alkuwaiti, M., Talal, A., Masuadi, E., Albluwi, G., Alkuwaiti, A., & Alao, D. O. (2025). Knowledge and experience of local emergency care staff on stroke recognition and acute care in the United Arab Emirates. *International Journal of Emergency Medicine*, *18*(1). https://doi.org/10.1186/s12245-025-00970-9

Anggraini, R., Munawaroh, I., Purwacaraka, M., & Saputri, B. Y. (2025). Effectiveness Of Peer-Based Health Education With Audio-Visual Media In Enhancing Emergency Triage Competence. *Jurnal Kesehatan Kusuma Husada*, 29–36. https://doi.org/10.34035/jk.v16i2.1809

Blackwood, L., Hollo, Z., & Amaratunge, L. (2025). Electronic learning methods compared to traditional learning methods in anaesthesia education: a systematic review. *BMC Medical Education*, *25*(1). https://doi.org/10.1186/s12909-025-07502-2

Brame, C. J. (2016). Effective educational videos: Principles and guidelines for maximizing student learning from video content. *CBE Life Sciences Education*, *15*(4), es6.1-es6.6. https://doi.org/10.1187/cbe.16-03-0125

Fatimah, S., Situmorang, R., Sukarjo, S., Mottershead, R., & Subu, M. A. (2024). Exploring Nursing Students' Perceptions of Using Video-Assisted In Basic Nursing Skills Teaching And Learning: A Qualitative Study. *Pakistan Journal of Life and Social Sciences*, *22*(2), 9252–9262. https://doi.org/10.57239/PJLSS-2024-22.2.00700

Gutiérrez-González, R., Zamarron, A., & Royuela, A. (2024). Video-based lecture engagement in a flipped classroom environment. *BMC Medical Education*, *24*(1). https://doi.org/10.1186/s12909-024-06228-x

Kadhim, S. A., Abdulwahhab, M. M., Ismail, M. A., Fadhil, I. A., & Ali, M. N. (2022). Nursing Students' Knowledge Regarding Emergency Management Of Patients With Stroke At Al-Bayan University. *Journal for Medical & Health Sciences*, *1*.

Kemenkes Republik Indonesia. (2019). *Pedoman nasional pelayanan kedaruratan medis*. Jakarta: Kementerian Kesehatan RI.

Kusumawati, A. E. (2023). The Influence Of Application Of Video Based Learning Media On Student Learning Outcomes. *Jurnal Manajemen Pendidikan*, *5*. https://doi.org/10.55352/mudir

Mayer, R. E. (2009). Multimedia learning (2nd ed.). Cambridge University Press.

Miri, K., Yaghoubi, A., Kholousi, S., Yousofzadeh, M., Zanganeh, A., Gharayi, M., & Namazinia, M. (2024). Comparative study on the impact of 'Infographic versus video feedback' on enhancing students' clinical skills in basic life support. *BMC Medical Education*, *24*(1). https://doi.org/10.1186/s12909-024-05763-x

Navarrete, E., Nehring, A., Schanze, S., Ewerth, R., & Hoppe, A. (2025). A Closer Look into Recent Video-based Learning Research: A Comprehensive Review of Video Characteristics, Tools, Technologies, and Learning Effectiveness. In *International Journal of Artificial Intelligence in Education*. Springer. https://doi.org/10.1007/s40593-025-00481-x

Putri, F. F., Winanda, V. S., & Tarihoran, N. (2025). The Role of Videos in Enhancing English Language Skills: A Systematic Literature Review. *Jurnal Ilmu Sosial Dan Humaniora)*, *3*(4), 469–488. https://journal.ikmedia.id/index.php/jishum

Potter, P. A., Perry, A. G., Stockert, P. A., & Hall, A. M. (2017). *Fundamentals of nursing* (9th ed.). St. Louis: Mosby Elsevier.

Rossis, C., Michail, K. A., Middleton, N., Karanikola, M., Papathanassoglou, E., & Mpouzika, M. (2024). Knowledge on Stroke Recognition and Management among Emergency Department Healthcare Professionals in the Republic of Cyprus. *Healthcare (Switzerland)*, *12*(1). https://doi.org/10.3390/healthcare12010077

PROFESIONAL HEALTH JOURNAL
Volume 7, No. 2 (Page. 822-830)
Available Online at https://www.ojsstikesbanyuwangi.com/index.php/PHJ/index
E-ISSN 2715-6249
DOI: https://doi.org/10.54832/phj.v7i2.1399

Safwan, J., Iskandar, K., Haddad, C., Sacre, H., Salameh, P., Youssef, S., Akl, T., Sfeir, Y., Hosseini, H., Sakr, F., & Cherfane, M. (2024). Assessing the efficacy of an educational video on stroke knowledge in Lebanon: a single-arm interventional study. *BMC Public Health*, *24*(1). https://doi.org/10.1186/s12889-024-20552-3

Sari, I. P., & Sundari, S. (2021). The Use of Video as a Learning Strategy in Supporting the Increasing Knowledge and Clinical Skills of Nursing Students. *Media Keperawatan Indonesia*, *4*(1), 47. https://doi.org/10.26714/mki.4.1.2021.47-55

Shukla, S. G. (2024). A study to assess effectiveness of video assisted teaching regarding knowledge of predicting risk of stroke among the BSc. Nursing 3rd year students of selected nursing colleges of Jabalpur, Madhya Pradesh. *International Journal of Advance Research in Medical Surgical Nursing*, *6*(1), 30–32. https://doi.org/10.33545/surgicalnursing.2024.v6.i1a.165

Wong, A. K. C., Hung, T. T. M., Bayuo, J., & Wong, F. K. Y. (2023). The development and implementation of a blended video watching and peer learning model for master's nursing students: a quasi-experimental study. *BMC Nursing*, *22*(1). https://doi.org/10.1186/s12912-023-01204-0

Yang, S. Y., & Oh, Y. H. (2023). Video-Assisted Versus Traditional Problem-Based Learning: A Quasi-Experimental Study Among Pediatric Nursing Students. *Journal of Nursing Research*, *31*(3), E277. https://doi.org/10.1097/jnr.0000000000000557

Zhao, Y., Xu, Y., Ma, D., Fang, S., Zhi, S., He, M., Zhu, X., Dong, Y., Song, D. P., Yiming, A., & Sun, J. (2024). The impact of education/training on nurses caring for patients with stroke: a scoping review. *BMC Nursing*, *23*(1). https://doi.org/10.1186/s12912-024-01754-x