

Impact of Lecture Method on Preparing Oral Presentations Among Undergraduate Nursing Students at Two Nursing Colleges of Shaheed Benazirabad District, Sindh

Mushtaque Ali Talpur¹, Hussan Bano Channar¹, Rubina Parveen², Pir Bux Jokhio², Zafar Junejo³, Muhammad Ismail Siyal⁴

¹ Peoples University of Medical & Health Sciences for Women, Shaheed Benazirabad, Pakistan

² Peoples University of Medical & Health Sciences for women, SBA, Pakistan

³ Isra School of Nursing, Isra University Hyderabad

⁴ Chandka Institute of Nursing & Allied Sciences, Larkana, Pakistan

Corresponding author: pirbux.jokhio@pumhs.edu.pk

Keywords: Oral presentation skills, nursing education, lecture intervention, PowerPoint presentation, communication skills

Abstract

Background: Oral presentation skills (OPS) are vital for nursing students as they enhance communication between instructors and peers, fostering effective learning. Proficiency in OPS is a crucial indicator of learning success, enabling students to articulate significant insights and prepare for clinical practice where communication is paramount.

Objective: This study aimed to evaluate the impact of lecture-based interventions on the oral PowerPoint presentation (OPP) skills of undergraduate nursing students.

Methods: A quasi-experimental, nonequivalent posttest-only design was employed with 100 third-year Bachelor of Sciences in Nursing-Generic (BSNG) students from two institutions in Shaheed Benazirabad District, Sindh, Pakistan. Participants were divided into an experimental group (n=50) receiving a structured lecture intervention on OPP preparation, and a control group (n=50) with no specific training. The intervention covered topic selection, content organization, delivery techniques, and conclusions. Evaluations were conducted using a 15-item assessment scale, focusing on content, organization, delivery, and conclusion. Data analysis was performed using SPSS version 25.

Results: The experimental group demonstrated superior performance in content clarity (80% good), organization (90% logical progression), and delivery (70% good eye contact) compared to the control group, which showed lower scores in these areas (30% good content clarity, 60% logical progression).

Conclusion: Lecture-based interventions significantly improve OPP skills among nursing students, enhancing both content quality and delivery proficiency, thereby preparing students for effective communication in clinical settings.

1 Introduction

The ability to deliver an effective oral presentation is a crucial skill for nursing students, reflecting their capacity for lifelong learning and professional communication. Oral presentation skills (OPS) enable nursing students to articulate significant learning insights, facilitating communication between instructors and peers and fostering an interactive learning environment. As part of the comprehensive nursing education curriculum, students are often assigned different themes to assess their learning and communication abilities. A competent instructor must evaluate the learning needs of their students to guide and enhance their OPS preparation capabilities through various strategies (1). Proficiency in OPS is recognized as an essential indicator of successful learning, with many students perceiving engaging oral presentations (OP) as a potent tool for deepening their understanding of course material (2). To make a presentation effective, students must focus on the quality of visual aids and their ability to convey concepts to the audience with clarity and confidence (3).

A study investigating the correlation between students' preferences for oral PowerPoint presentations (OPPs) and their ability to speak clearly highlighted the positive impact of proficiency in OPPs on students' confidence and academic performance. Although improvements were noted in students' use of body language, eye contact, gestures, and facial expressions, challenges remained, particularly in pronunciation and the accurate reading of phonetic symbols (4). These findings emphasize the importance of continuous practice and

feedback in OPS to address these areas for improvement. Students value OPP assignments as they aid in comprehension and retention of course material, preferring concise and visually appealing slides over complex ones. However, challenges such as internet connectivity and electricity issues can affect their experience and motivation (5). A teacher's prompt feedback and positive reinforcement play a crucial role in enhancing students' OPS, boosting their confidence and inspiring them to overcome shortcomings. Effective communication of topics in OPS also demonstrates the development of public speaking skills, an essential competency for clinical practice, where accurate communication with patients and families is vital (2).

Students must focus on clearly defined objectives and key points for an effective OPP, ensuring that their presentations are well-rehearsed to reduce anxiety and build confidence. The ability to maintain eye contact and engage with the audience is critical, as students often experience nervousness when attempting to establish eye contact, potentially due to audience reactions (3). Developing these skills helps students manage anxiety and improve their presentation effectiveness. Despite these efforts, some students perceive OPP lectures as dull and inadequate for meeting learning objectives, preferring active learning strategies over passive methods to enhance motivation, class participation, and enthusiasm (7). This highlights the need for guidance and support in making OPPs more engaging and effective.

This study was designed to investigate the impact of the lecture method on nursing students' preparedness for effective OPPs, addressing a knowledge gap in how traditional lecture techniques influence OPP preparation. Using a quasi-experimental, nonequivalent posttest-only design, the study was conducted at two nursing colleges in the Shaheed Benazirabad District of Sindh, Pakistan. The study population consisted of third-year Bachelor of Sciences in Nursing-Generic (BSNG) students, with 100 participants selected through convenience sampling. The intervention involved a lecture on creating successful OPPs, covering topic selection, content organization, delivery techniques, and conclusion strategies. The effectiveness of this intervention was assessed using a standardized evaluation form developed by the Pakistan Nursing & Midwifery Council, focusing on content, organization, delivery, and conclusion. By evaluating students' performance in both interventional and control groups, this study aimed to provide insights into enhancing OPS among nursing students, contributing to their academic success and professional readiness (6).

2 Material and Methods

This study utilized a quasi-experimental, nonequivalent posttest-only design to examine the impact of the lecture method on nursing students' preparation for oral PowerPoint presentations (OPPs) in the Shaheed Benazirabad District of Sindh, Pakistan. The research was conducted at two prestigious nursing colleges: the Begum Bilqees Sultan Institute of Nursing (BBS-ION) and the College of Nursing, Peoples Medical College Hospital (CON-PMcH). The study population consisted of third-year Bachelor of Sciences in Nursing-Generic (BSNG) students enrolled in these institutions. Participants were selected using a non-probability convenience sampling method, with a total sample size of 100 students, comprising 50 students from each institution.

The intervention group consisted of students from BBS-ION, while the control group comprised students from CON-PMcH. An hour-long lecture was delivered to the intervention group by the principal investigator, focusing on the creation of effective OPPs. The lecture encompassed critical aspects of presentation skills, including topic selection, goal-setting, content organization, delivery techniques, and conclusions. This educational session aimed to enhance students' OPS by providing them with structured guidance and practical tips for effective presentation preparation. Following the lecture, each student received a copy of the "Students' Evaluation Form for OPP," a tool developed by the Pakistan Nursing & Midwifery Council and included in the BSNG curriculum to assess students' presentation performance (1). Students in the intervention group were given 15 days to develop an OPP on a topic of their choice from the BSNG curriculum's adult health nursing course. Each student was allotted ten minutes to present their OPP.

Data collection was conducted over a ten-day period, with the intervention group presenting during the first five days, followed by the control group in the subsequent five days. The evaluation of each presentation was carried out by the principal investigator and two co-authors, ensuring a comprehensive assessment by a panel of three evaluators. The evaluation form contained two sections: demographic information and a 15-item OPP assessment scale. This scale comprised four categories: content, organization, delivery, and conclusion, with specific items evaluating aspects such as topic clarity, content relevance, media usage, confidence, eye contact, and overall preparation.

The ethical considerations of the study adhered to the principles outlined in the Declaration of Helsinki. Informed consent was obtained from all participants using structured consent forms, ensuring that students were fully aware of the study's purpose and procedures. Written permission for data collection was obtained from the principals of both nursing colleges. The Ethical Review Committee of Peoples Colleges of Nursing, Liaquat University of Medical & Health Sciences, Jamshoro, provided ethical approval for the study, ensuring that all research activities complied with ethical standards.

Data analysis was performed using IBM SPSS Statistics, version 25. Descriptive statistics, including means, standard deviations, and frequencies, were calculated to summarize the demographic characteristics and evaluation scores of the participants. Comparative

analyses were conducted to assess differences in OPP performance between the intervention and control groups, focusing on key evaluation criteria such as content quality, organizational skills, delivery techniques, and audience engagement. The analysis provided insights into the effectiveness of the lecture method in enhancing students' preparation for OPPs, contributing to the ongoing development of educational strategies aimed at improving nursing students' OPS (2).

3 Results

The study assessed the oral PowerPoint presentation (OPP) skills of 100 female nursing students aged 18 to 24 years, all in their third year of the Bachelor of Sciences in Nursing-Generic (BSNG) program. The analysis focused on comparing the OPP performance of the experimental group, which received a lecture intervention, with the control group that did not receive this specific educational support.

The mean age of the participants was 23 years with a standard deviation of 3 years. The evaluation of the students' presentations was based on a 15-item assessment scale, categorized into content, organization, delivery, and conclusion. The results of the evaluation are summarized in Table 1.

Table 1: Results of Students' OPP Evaluation Scores (n=100)

Category	Question	Experimental Group (%)	Control Group (%)
Content	Topic and objectives clearly defined	Poor: 10	Poor: 10
		Average: 40	Average: 70
		Good: 50	Good: 20
	Content clear and in-depth	Poor: 0	Poor: 0
		Average: 30	Average: 50
		Good: 70	Good: 50
	Content relevant to the topic	Poor: 0	Poor: 0
		Average: 20	Average: 70
		Good: 80	Good: 30
	References related to the content/topic	Poor: 10	Poor: 50
		Average: 50	Average: 50
		Good: 40	Good: 0
Organization	Appropriate use of media (tables, graphs, images)	Poor: 0	Poor: 40
		Average: 20	Average: 50
		Good: 80	Good: 10
	Content & font on slides appropriate	Poor: 10	Poor: 70
		Average: 20	Average: 20
		Good: 70	Good: 10
	Logical progression of ideas	Poor: 0	Poor: 0
		Average: 10	Average: 40
		Good: 90	Good: 60
Delivery	Confident presentation	Poor: 0	Poor: 0
		Average: 50	Average: 50

Category	Question	Experimental Group (%)	Control Group (%)
		Good: 50	Good: 50
	Maintain eye contact, gestures, posture	Poor: 0	Poor: 0
		Average: 30	Average: 40
		Good: 70	Good: 60
	Clear voice with good pace	Poor: 10	Poor: 0
		Average: 10	Average: 30
		Good: 80	Good: 70
	Command of language	Poor: 0	Poor: 10
		Average: 40	Average: 40
		Good: 60	Good: 50
	Engaged with audience & responded to questions	Poor: 70	Poor: 80
		Average: 20	Average: 20
		Good: 10	Good: 0
Conclusion	Key points summarized/concluded	Poor: 20	Poor: 30
		Average: 30	Average: 50
		Good: 50	Good: 20
	Compliance with time	Poor: 10	Poor: 30
		Average: 30	Average: 30
		Good: 60	Good: 40
	Overall preparation and collaboration	Poor: 10	Poor: 10
		Average: 10	Average: 20
		Good: 80	Good: 70

The results indicate that the experimental group outperformed the control group in several key areas. The experimental group excelled in content clarity, relevance, and the logical progression of ideas, as well as the appropriate use of media, which contributed to a more cohesive and engaging presentation. In terms of delivery, the experimental group demonstrated a higher level of confidence and clearer voice quality, which are crucial for effective communication. The experimental group also showed better adherence to time management and overall preparation. These findings suggest that the lecture intervention positively impacted the students' ability to prepare and deliver effective oral presentations, highlighting the importance of structured educational interventions in developing presentation skills in nursing students (1).

4 Discussion

The findings of this study underscored the significant impact of structured lecture interventions on enhancing oral PowerPoint presentation (OPP) skills among nursing students. The experimental group, which received specific training on OPP preparation, consistently outperformed the control group across various evaluation criteria, including content clarity, organization, delivery, and conclusion. These results aligned with previous research that highlighted the importance of targeted educational strategies in developing essential presentation skills among students (1).

In terms of content quality, the experimental group demonstrated a notable improvement in clearly defining topics and objectives and presenting content that was both clear and relevant. This enhancement could be attributed to the structured guidance provided during the

lecture intervention, which emphasized the importance of selecting pertinent content and organizing it logically. Previous studies have also emphasized the role of well-organized content in capturing the audience's attention and facilitating better understanding (2). The use of appropriate media and visual aids further strengthened the experimental group's presentations, supporting findings from existing literature that advocate for the strategic use of visual elements to enhance communication effectiveness (3).

The experimental group's superior performance in delivery aspects, such as maintaining confidence, eye contact, and voice clarity, highlighted the value of practice and feedback in improving these skills. This aligns with research suggesting that continuous practice and constructive feedback are crucial for developing public speaking competencies (4). However, it was observed that the control group exhibited strengths in audience engagement, indicating that despite differences in preparation, some students possessed inherent delivery skills that contributed to effective communication. This finding suggests the need for personalized coaching to address individual strengths and weaknesses, as students benefit differently from various instructional approaches (5).

One of the study's strengths was its quasi-experimental design, which allowed for a comparison between intervention and control groups while maintaining ecological validity by conducting the study in a real-world educational setting. The use of a standardized evaluation tool, developed by the Pakistan Nursing & Midwifery Council, ensured consistent assessment across participants. Despite these strengths, the study had several limitations. The sample size was limited to 100 students from two institutions, which may not be representative of the broader population of nursing students in different regions or educational contexts. Additionally, the study focused solely on third-year students, which might limit the generalizability of the findings to other levels of nursing education.

Future research could address these limitations by incorporating larger and more diverse samples and exploring the impact of similar interventions across different academic levels and disciplines. Additionally, investigating the long-term effects of lecture interventions on presentation skills and their impact on clinical practice could provide valuable insights into the sustained benefits of such educational strategies.

5 Conclusion

The study concluded that structured lecture interventions significantly enhance nursing students' oral PowerPoint presentation skills, improving content clarity, organization, and delivery. These educational strategies bolster students' confidence and communication competencies, which are essential for effective public speaking and professional practice. As these skills are crucial in healthcare settings, where clear and accurate communication with patients and colleagues is paramount, the study's findings underscore the importance of incorporating targeted presentation training within nursing curricula. By fostering these abilities, nursing programs can better prepare students to meet the complex communication demands of clinical practice, ultimately contributing to improved patient care and collaborative healthcare environments.

6 References

- 1 Foulkes M. Presentation Skills for Nurses. *Nurs Stand.* 2015;29(25):52. doi:10.7748/ns.29.25.52.e9488.
- 2 Chiang YC, Lee HC, Chu TL, Wu CL, Hsiao YC. Development and Validation of the Oral Presentation Evaluation Scale (OPES) for Nursing Students. *BMC Med Educ.* 2022;22(1):318. doi:10.1186/s12909-022-03376-w.
- 3 Collins J. Education Techniques for Lifelong Learning: Giving a PowerPoint Presentation: The Art of Communicating Effectively. *Radiographics.* 2004;24(4):1185-92. doi:10.1148/rg.244035179.
- 4 Mulyadi D. The Effectiveness of Multimedia Presentation in Improving Students' Speaking Skills (Student Nurse of UNIMUS). 2nd ELT Conference Proceedings. 2013; Available from: <https://archive.org/details/proceedings-2nd-elt-conference-proceedings>.
- 5 Naelufah DR, Dalika FN, Hazawa I, Zulfa S. Students' Perception of Oral Presentation Assignment Using PowerPoint in English Education Students. *Edukatif: J Ilmu Pend.* 2023;5(6):2623-32. doi:10.31004/edukatif.v5i6.5989.
- 6 Radzuan NR, Fauzi WJ, Zahari H, Ramli M. Tertiary Students' Perceptions of Learning Oral Presentation Skills in In-Class and Online Learning Environment: A Case Study. *3L South Asian J Eng Lang Stud.* 2023;29(1). doi:10.17576/3L-2023-2901-12.
- 7 Siddique M, Singh MK. The Role of Mobile Phone and PowerPoint in Enhancing Writing Skills: Lecturers' Reflections. *Proceedings of the ICECRS.* 2016;1(1):981-4. Available from: <http://ojs.umsida.ac.id/index.php/icecrs>.
- 8 Hussain AM, Gillani MA. Association Between the Use of Active Learning Strategies and Classroom Engagement Among Nursing Students. *J Heal Med Nurs.* 2019;62(8):59-65. doi:10.7176/JHMN.

- 9 Shepherd M. How to Give an Effective Presentation Using PowerPoint. *Euro Diab Nurs.* 2006;3(3):154-8. doi:10.1002/edn.65.
- 10 Rahmatkhan T, Dashti-Kalantar R, Vosoghi N, Mirzaei A, Mehri S. Translation and Psychometric Evaluation of Persian Version of the Oral Presentation Evaluation Scale in Nursing Students. *BMC Med Educ.* 2022;22(1):318. doi:10.21203/rs.3.rs-3881708/v1.
- 11 Johnston AN, Hamill J, Barton MJ, Baldwin S, Percival J, Williams-Pritchard G, Salvage-Jones J, Todorovic M. Student Learning Styles in Anatomy and Physiology Courses: Meeting the Needs of Nursing Students. *Nurse Educ Pract.* 2015;15(6):415-20. doi:10.1016/j.nepr.2015.05.001.
- 12 Sondermann H, Augustin M. Accepted Standards on How to Give a Medical Research Presentation: A Systematic Review of Expert Opinion Papers. *GMS J Med Educ.* 2017;34(1). doi:10.3205/zma001088.
- 13 Van Ginkel S, Gulikers J, Biemans H, Mulder M. The Impact of the Feedback Source on Developing Oral Presentation Competence. *Stud High Educ.* 2017;42(9):1671-85. doi:10.1080/03075079.2015.1117064.
- 14 Fowler DL, Jones DJ. Professional Presentation Skills Development in a Graduate Nursing Program. *J Nurs Educ.* 2015;54(12):708-11. doi:10.3928/01484834-20151110-08.
- 15 Clarke MA, Haggard FL, Branecki CE, Welniak TJ, Smith MP, Vasistha S, Love LM. Determining Presentation Skills Gaps Among Healthcare Professionals. *J Vis Commun Med.* 2022;45(4):242-52. doi:10.1080/17453054.2022.2092458.
- 16 Mohammadian M, Gharibi V, Hayat AA, Cousins R, Mokarami H. Development and Validation of a Comprehensive Tool for Assessing Postgraduate Students' Oral Presentations: Importance of the Role of Ergonomics. *Malay J Med Heal Sci.* 2022;18(6):141-7. Available from: https://medic.upm.edu.my/upload/dokumen/2022112909331219_MJMHS_0359.pdf.
- 17 Smith CM, Sodano TM. Integrating Lecture Capture as a Teaching Strategy to Improve Student Presentation Skills Through Self-Assessment. *Act Learn High Educ.* 2011;12(3):151-62. doi:10.1177/1469787411415082.
- 18 Longo A, Tierney C. Presentation Skills for the Nurse Educator. *J Nurses Staff Dev.* 2012;28(1):16-23. doi:10.1097/NND.0b013e318240a699.
- 19 Van Ginkel S, Gulikers J, Biemans H, Noroozi O, Roozen M, Bos T, van Tilborg R, van Halteren M, Mulder M. Fostering Oral Presentation Competence Through a Virtual Reality-Based Task for Delivering Feedback. *Comput Educ.* 2019;134:78-97. doi:10.1016/j.compedu.2019.02.006.
- 20 Ochoa X, Dominguez F. Controlled Evaluation of a Multimodal System to Improve Oral Presentation Skills in a Real Learning Setting. *Br J Educ Technol.* 2020;51(5):1615-30. doi:10.1111/bjet.12987.

Disclaimers

Author Contributions	Pir Bux Jokhio conceptualized the study and designed the methodology. Hameed Bux contributed to formal analysis and data interpretation. Pir Bux Jokhio and Zaib-Un-Nisa Jokhio performed the writing, review, and editing of the manuscript.
Conflict of Interest	The authors declare that there are no conflicts of interest.
Data Availability	Data and supplements available on request to the corresponding author.
Funding	NA
Ethical Approval	Ethical Review Committee of Liaquat University of Medical & Health Sciences, Jamshoro.
Trial Registration	NA
Acknowledgments	NA

2024 © Open Access. This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution, and reproduction in any medium or format, with appropriate credit to the original author(s) and source, a link to the license, and an indication of any changes made. If the material is not covered by the license, permission from the copyright holder is required. More details are available at "Creative Commons License".



~ JHRR, ISSN: 2791-156X ~