



# Evaluating communication skills of undergraduate healthcare students in Malaysia

Rusila Ruslan <sup>1\*</sup>   
Siti Nur Dini Abdullah <sup>2</sup>

<sup>1</sup> Department of Critical Care Nursing,  
Kulliyah of Nursing, International  
Islamic University Malaysia, Malaysia

<sup>2</sup> National Heart Institute, Kuala  
Lumpur, Malaysia

\*Correspondence:  
Rusila Ruslan

Kulliyah of Nursing, International  
Islamic University Malaysia, 25200  
Pahang Darul Makmur, Malaysia.  
Tel. No: +609 - 570 7339  
Fax No: +609 - 513 3615  
[rusilaruslan@iiu.edu.my](mailto:rusilaruslan@iiu.edu.my)

Volume 4(1), 9-15  
© The Author(s) 2025  
<http://dx.doi.org/10.55048/jpns141>

e-ISSN 2827-8100  
p-ISSN 2827-8496

Received : August 8, 2024  
Revised : December 11, 2025  
Accepted : January 3, 2025  
Published : January 15, 2025



This is an **Open Access** article distributed under the terms of the [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

## ABSTRACT

**Background:** Effective communication is a cornerstone of safe and high-quality patient care, influencing clinical outcomes, patient satisfaction, and trust in healthcare providers. Inadequate communication skills among healthcare professionals have been linked to preventable adverse events, delayed treatment, and diminished therapeutic relationships. Early development of communication competencies during undergraduate training is therefore essential to prepare future healthcare professionals for patient-centered practice.

**Objective:** This study aimed to assess the communication skills of undergraduate healthcare students at the International Islamic University Malaysia (IIUM), Kuantan, Pahang, and to examine whether demographic factors influence these skills.

**Methods:** A descriptive cross-sectional survey was conducted from March to April 2024 among 197 undergraduate students from medicine, nursing, pharmacy, dentistry, and allied health faculties. Communication skills were measured using the validated Self-Efficacy 12 (SE-12) questionnaire. Fisher's exact and chi-square tests were applied to evaluate associations between communication skills and demographic variables including age, gender, year of study, and faculty affiliation. **Results:** More than half of the participants (54.8%) demonstrated good communication skills, whereas 45.2% exhibited poor skills, reflecting the need for curriculum strengthening. No significant associations were observed between communication skills and demographic characteristics ( $p > 0.05$ ), suggesting that factors beyond sociodemographics—such as teaching methods, learning opportunities, and personal experiences—may be more influential.

**Conclusion:** Communication proficiency among healthcare undergraduates is not determined by demographic factors. Integrating comprehensive, experiential communication training into healthcare curricula could enhance competencies, improve patient safety, and foster more effective provider-patient relationships. Future research should explore additional determinants to guide targeted educational interventions.

**Keywords:** healthcare communication; patient safety; undergraduate healthcare education; communication skills assessment

## Nursing and Healthcare Practices

- *Nursing and healthcare curricula should include structured communication training modules to enhance students' interpersonal skills and ensure better patient outcomes.*
- *Implement routine evaluation of communication skills among students and practitioners, coupled with constructive feedback, to promote continuous improvement and professional development.*
- *Since communication proficiency is not significantly influenced by demographic factors, educational institutions should prioritize innovative teaching methods and experiential learning to strengthen communication abilities in healthcare settings.*

## INTRODUCTION

Approximately 40% of patients in primary and ambulatory healthcare settings may experience preventable harm, with communication identified as a key contributing factor (Howick et al., 2024). The World Health Organization underscores the critical role of effective communication in promoting health awareness, particularly during the COVID-19 pandemic, when communication breakdowns frequently strained healthcare–patient relationships (Vaz, 2023). Clear and accurate communication is essential for conveying important health information, including disease prognosis, dietary guidance, and medication instructions. It is closely linked to patient safety practices such as medication verification, fall prevention, and infection control (Ratna, 2019; Kim, Cho, & Park, 2022). To prevent adverse outcomes and maintain patient safety, healthcare providers must continually strengthen their communication competencies (Tiwarly, Rimal, Paudyal, Sigdel, & Basnyat, 2019). Equipping healthcare students with skills in effective communication, cultural competence, and patient safety is vital, as it prepares them to enhance health literacy, build patient trust, and promote positive health behaviours (Anton-

Solanas et al., 2021; Fisher & Kiernan, 2019; Soares et al., 2022). Furthermore, students' experiences in raising concerns about patient safety during their education help instill a strong sense of responsibility, ensuring they are better prepared to safeguard patient well-being in their future professional roles (Fisher & Kiernan, 2019).

Inadequate communication skills among healthcare professionals can harm patient well-being. This can result in delays in treatment, a negative perception of healthcare workers, and dissatisfaction with the overall healthcare experience (Kwama & Petrucka, 2021). Poor communication, which includes verbal abuse, disrespect, and denial of information, can undermine the establishment of trust between patients and providers. As a result, it becomes difficult to form a therapeutic alliance. This breakdown in communication can lead to misunderstandings about treatment plans and medication regimens, potentially worsening health outcomes due to non-adherence to prescribed treatments. Effective communication is crucial for ensuring patient understanding, satisfaction, and positive health outcomes. Therefore, it is essential to address and improve communication skills through targeted training programs that focus on empathy, active listening, and communication strategies. These interventions are necessary to promote a patient-centred healthcare environment that prioritizes both physical and emotional well-being. Despite its importance, poor communication continues to be a significant factor contributing to adverse effects on patient well-being, highlighting the need for interventions to enhance communication in healthcare settings (Kwama & Petrucka, 2021). Effective communication is crucial in healthcare for conveying information and delivering care. It ensures that patients feel comfortable asking questions and that healthcare providers use clear, straightforward language (Ratna, 2019). Approximately 83% of evidence supports that communication with relatives improves end-of-life decisions, highlighting the importance of informed discussions (Aderson et al., 2019). Building trust and rapport between patients and providers enhances patient satisfaction with treatments (Jin et al., 2022). Healthcare providers must regularly assess patients' knowledge to ensure they understand their disease, medication, and treatment options (Tiwarly et al., 2019). Effective communication is also vital in critical care settings, such

as in the ICU, where it helps mechanically ventilated patients express their feelings despite communication barriers (Holm et al., 2021). Furthermore, strong communication skills enhance treatment plans, improve satisfaction for both patients and healthcare professionals, and foster collaboration and shared responsibility among staff, reducing workplace conflicts (Mahvar et al., 2020). Open communication between leaders and frontline staff promotes a safety culture, increasing awareness, trust, and confidence in decision-making (Aldawood et al., 2020; Paddley et al., 2022).

Therefore, this study was conducted to assess the level of communication among undergraduate healthcare students in a public university in Pahang, Malaysia. It holds significant value in addressing the persistent issue of inadequate communication in healthcare settings and its detrimental impact on patient well-being. The research examines various forms of poor communication, including verbal abuse, disrespect, and withholding of information, which can undermine trust and hinder therapeutic relationships. By identifying potential root causes of disruptions in patient-provider interactions, the study aims to inform targeted interventions for enhancing communication skills among healthcare professionals. The findings are expected to provide practical benefits for healthcare practitioners, administrators, and educators by offering evidence-based recommendations to improve communication in clinical practice. Such improvements can help mitigate treatment delays, reduce negative perceptions of healthcare providers, and strengthen patient adherence to care plans. Furthermore, the study underscores the importance of adopting a patient-centered approach to elevate care quality and outcomes, contributing to the broader discourse on healthcare improvement and supporting interventions that promote holistic patient well-being (Bhati, Deogade, & Kanyal, 2023). The specific purpose of this study was to evaluate the communication skills of undergraduate healthcare students and examine whether these skills are associated with demographic factors.

## METHODS

### Design

This cross-sectional study employed a

quantitative research design to examine communication practices among undergraduate healthcare students, with a focus on assessing both the prevalence of effective and ineffective communication and identifying factors that may contribute to poor communication within healthcare settings. The investigation was carried out at the International Islamic University Malaysia (IIUM), Kuantan, Pahang, over a two-month period from March to April 2024. This timeframe allowed for adequate recruitment and data collection across multiple healthcare-related faculties, including medicine, nursing, pharmacy, dentistry, and allied health sciences. The study was conducted in strict adherence to ethical research standards, with prior approval obtained from the relevant institutional ethics committees. This ensured that all research procedures upheld principles of confidentiality, voluntary participation, and informed consent, thereby safeguarding the rights and welfare of participants while maintaining the integrity of the research process.

### Sample and Setting

The study population comprised 2,247 undergraduate students enrolled across multiple healthcare-related faculties at the International Islamic University Malaysia (IIUM) in Kuantan, including Medicine, Nursing, Pharmacy, Dentistry, and Allied Health Sciences. Participants were recruited using a random sampling technique to ensure representativeness across faculties, and selection was guided by clearly defined inclusion and exclusion criteria to maintain the relevance and validity of the findings. The required sample size was determined using the Raosoft sample size calculator, which incorporated a 5% margin of error, a 95% confidence level, and the total population size. Based on this calculation, a minimum of 329 participants was required; this number was increased by 10% to account for potential non-response or incomplete data, resulting in a final target sample of 362 students.

### Instruments

The study instrument comprised a structured questionnaire designed to capture comprehensive information on participants' communication practices, perceived challenges, and experiences with poor communication in healthcare settings. It included both general and context-specific items addressing the effectiveness of

communication, common barriers, and the perceived impact of these barriers on patient care. Communication effectiveness and related constructs were assessed using Likert-scale items, enabling quantification of attitudes and perceptions on a graded scale. In addition, demographic data—such as participants' academic program, year of study, clinical exposure, and relevant experience—were collected to provide contextual understanding of the sample characteristics.

To specifically evaluate clinical communication competence, the validated Self-Efficacy 12 (SE-12) questionnaire developed by [Axboe et al. \(2016\)](#) was utilized. This instrument measures healthcare professionals' and students' self-reported certainty in their ability to perform various communication tasks, with responses ranging from "very uncertain" to "very certain." The SE-12 has demonstrated strong internal consistency, with a Cronbach's alpha of 0.95, supporting its reliability in assessing communication-related self-efficacy. This standardized tool ensured that measurement was both psychometrically robust and comparable to other studies in the field.

## Data Collection

Data were collected using a structured questionnaire that was electronically distributed to participants via a secure online platform, ensuring accessibility across all faculties and minimizing logistical barriers to participation. The questionnaire was designed to capture detailed information on students' communication experiences, perceived challenges, and overall perceptions of their communication skills within healthcare contexts. This mode of distribution allowed respondents to complete the survey at their convenience, thereby promoting higher response rates, while also ensuring anonymity and reducing potential social desirability bias in responses.

## Data Analysis

Data were analyzed using IBM SPSS Statistics software, version 27.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participants' demographic characteristics and communication skill levels. Inferential statistics, specifically Fisher's exact test and chi-square test, were applied to examine associations between communication skills

and demographic variables, with a significance level set at  $p < 0.05$ . The results are presented in tabular and narrative form to provide a comprehensive understanding of the findings and to facilitate interpretation for educational and clinical application.

## Ethical Consideration

Participants' anonymity and confidentiality were strictly maintained throughout the study. Informed consent was obtained electronically via the self-administered questionnaire, with the return of a completed questionnaire indicating voluntary agreement to participate. Respondents were informed of their right to decline participation or withdraw from the study at any stage without penalty. All ethical principles, including respect for autonomy, beneficence, and non-maleficence, were adhered to in accordance with established research guidelines. Ethical approval for the study was granted by the Kulliyyah of Nursing Postgraduate Research Centre (KNPGRC) and the International Islamic University Malaysia (IIUM) Research Ethics Committee (IREC), ensuring compliance with institutional and national standards for research involving human participants.

## RESULTS

This study evaluated the communication skills of undergraduate healthcare students at the International Islamic University Malaysia (IIUM) in Kuantan, Pahang. While the initial target sample size was 362 students, a total of 197 students voluntarily participated in the survey. The results showed that 54.8% of respondents demonstrated good communication skills, whereas 45.2% exhibited poor communication skills. This near-equal distribution underscores a pressing need for curriculum enhancement to strengthen students' communication competencies. Such skills are critical for ensuring accurate diagnosis, fostering effective patient care, and facilitating collaborative teamwork in healthcare environments ([Alotaibi & Alsaeedi, 2016](#)). The findings suggest that without targeted educational interventions, a significant proportion of future healthcare professionals may enter clinical practice without the communication proficiency necessary to optimize patient outcomes and interprofessional collaboration.



## DISCUSSION

Enhancing communication skills among healthcare students is a critical priority for improving patient outcomes, fostering trust, and ensuring the efficiency of healthcare delivery systems (White et al., 2023). The present findings reveal that nearly half of the participating students demonstrated poor communication skills, highlighting a significant educational gap. This aligns with prior studies showing that deficiencies in communication among healthcare students and professionals are linked to reduced patient satisfaction, increased risk of clinical errors, and diminished interprofessional collaboration (Ratna, 2019; Tiwary et al., 2019). Integrating structured, evidence-based communication skills training into healthcare curricula is therefore essential. Such training should include simulation-based learning, role-play exercises, and feedback-driven assessments, all of which have been shown to strengthen interpersonal competencies and clinical readiness.

The study also examined the relationship between demographic characteristics—such as age, gender, year of study, and faculty affiliation—and communication skills. Statistical analysis using Fisher's exact test and the chi-square test revealed no significant associations ( $p > 0.05$ ). These findings suggest that communication proficiency is not inherently shaped by sociodemographic factors, which is consistent with research indicating that skill development is more strongly influenced by learning opportunities, institutional teaching strategies, and personal engagement (Li et al., 2019; Buckley & Lee, 2021). This implies that communication training interventions can be designed to be universally applicable, ensuring equitable benefit for all students regardless of their demographic background.

Given these results, it is plausible that other determinants—such as the quality of instructional delivery, participation in extracurricular activities, exposure to interprofessional practice, and individual self-efficacy—play a more substantial role in shaping communication abilities. For instance, students with higher communication self-efficacy have been found to engage more confidently in patient interactions, leading to better clinical rapport and treatment adherence (Li et al., 2019). In the context of nursing and allied health education, fostering self-efficacy through repeated practice, mentorship, and

structured reflection can be a powerful strategy to enhance communication competence.

This study advocates for a comprehensive, inclusive approach to communication skills development in healthcare education. Such an approach should combine didactic instruction with experiential learning, integrate cultural competence into communication training, and ensure consistent formative evaluation throughout the curriculum. Moreover, future research should employ longitudinal and intervention-based designs to identify specific pedagogical strategies that produce sustained improvements in communication proficiency (Sheehan et al., 2021). A deeper understanding of these factors will enable educators to design targeted, evidence-informed interventions, ultimately preparing healthcare students to engage effectively with patients, families, and interdisciplinary teams, and to contribute to a safer, more patient-centered healthcare environment (Kunjukunju & Ahmad, 2019).

## Strengths and Limitations

A key strength of this study is the use of a validated and reliable measurement tool, the Self-Efficacy 12 (SE-12) questionnaire, which ensures high internal consistency and comparability with previous research. The inclusion of participants from multiple healthcare faculties at a large public university also enhances the representativeness of the findings within the institutional context. Additionally, the use of random sampling and adherence to rigorous ethical procedures strengthen the study's credibility. However, certain limitations should be acknowledged. The cross-sectional design precludes the establishment of causal relationships between communication skills and potential influencing factors. The reliance on self-reported data may introduce response and social desirability biases, potentially leading participants to overestimate their communication competence. Furthermore, as the study was conducted within a single institution, the generalizability of findings to other universities or healthcare training environments may be limited. Future research incorporating multi-institutional samples, objective performance-based assessments, and longitudinal follow-up could provide a more comprehensive understanding of communication skill development among healthcare students.

## CONCLUSION

The study conducted at the International Islamic University Malaysia (IIUM) found that the majority of undergraduate healthcare students demonstrated strong communication skills. Additionally, no significant associations were observed between sociodemographic factors and communication proficiency, suggesting that these skills are influenced by other determinants such as educational strategies, experiential learning opportunities, and individual attributes. These findings underscore the critical role of communication skills in preparing future healthcare professionals to engage effectively with patients, colleagues, and multidisciplinary teams. The results highlight the need for the university to implement structured programs and targeted interventions aimed at further strengthening communication competencies. Enhancing these skills is essential for ensuring accurate information exchange, fostering therapeutic relationships, and promoting high-quality, patient-centered care. The study recommends further research to identify additional factors that contribute to communication proficiency, which could inform the design of evidence-based educational initiatives to optimize patient interactions and outcomes.

## Declaration of Interest

None

## Acknowledgment

None

## Funding

None

## Data Availability

Authors can be contacted to access datasets created for and/or used in this study.

## REFERENCES

- Aldawood, F., Kazzaz, Y., AlShehri, A., Alali, H., & Al-Surimi, K. (2020). Enhancing teamwork communication and patient safety responsiveness in a paediatric intensive care unit using the daily safety huddle tool. *BMJ Open Quality*, 9(1), e000753. <https://doi.org/10.1136/bmjopen-2019-000753>
- Alotaibi, F. S., & Alsaedi, A. (2016). Attitudes of medical students toward communication skills learning in Western Saudi Arabia. *Saudi Medical Journal*, 37(7), 791–795. <https://doi.org/10.15537/smj.2016.7.14331>
- Anderson, R. J., Bloch, S., Armstrong, M., Stone, P. C., & Low, J. T. S. (2019). Communication between healthcare professionals and relatives of patients approaching the end-of-life: A systematic review of qualitative evidence. *Palliative Medicine*, 33(8), 926–941. <https://doi.org/10.1177/0269216319852007>
- Antón-Solanas, I., Tambo-Lizalde, E., Hamam-Alcober, N., Vanceulebroeck, V., Dehaes, S., Kalkan, I., Kömürçü, N., Coelho, M., Coelho, T., Nova, A. C., Cordeiro, R., Sagarra-Romero, L., Subirón-Valera, A. B., & Huércanos-Esparza, I. (2021). Nursing students' experience of learning cultural competence. *PLOS ONE*, 16(12), e0259802. <https://doi.org/10.1371/journal.pone.0259802>
- Axboe, M. K., Christensen, K. S., Kofoed, P. E., & Ammentorp, J. (2016). Development and validation of a self-efficacy questionnaire (SE-12) measuring the clinical communication skills of health care professionals. *BMC Medical Education*, 16, 272. <https://doi.org/10.1186/s12909-016-0798-7>
- Bhati, D., Deogade, M. S., & Kanyal, D. (2023). Improving patient outcomes through effective hospital administration: A comprehensive review. *Cureus*, 15(10), e47731. <https://doi.org/10.7759/cureus.47731>
- Buckley, P., & Lee, P. (2021). The impact of extra-curricular activity on the student experience. *Active Learning in Higher Education*, 22(1), 37–48. <https://doi.org/10.1177/1469787418808988>
- Davis, D. L., Tran-Taylor, D., Imbert, E., Wong, J. O., & Chou, C. L. (2021). Start the way you want to finish: An intensive diversity, equity, inclusion orientation curriculum in undergraduate medical education. *Journal of Medical Education and Curricular Development*, 8, 23821205211024450. <https://doi.org/10.1177/23821205211024450>
- Fisher, M., & Kiernan, M. (2019). Student nurses' lived experience of patient safety and raising concerns. *Nurse Education Today*, 77, 1–5. <https://doi.org/10.1016/j.nedt.2019.02.015>
- Holm, A., Karlsson, V., & Dreyer, P. (2021).

- Nurses' experiences of serving as a communication guide and supporting the implementation of a communication intervention in the intensive care unit. *International Journal of Qualitative Studies on Health and Well-Being*, 16(1), 1971598. <https://doi.org/10.1080/17482631.2021.1971598>
- Howick, J., Bennett-Weston, A., Solomon, J., Nockels, K., Bostock, J., & Keshtkar, L. (2024). How does communication affect patient safety? Protocol for a systematic review and logic model. *BMJ Open*, 14(5), e085312. <https://doi.org/10.1136/bmjopen-2024-085312>
- Jin, J., Son, Y. J., Tate, J. A., & Choi, J. Y. (2022). Challenges and learning needs of nurse-patients' family communication: Focus group interviews with intensive care unit nurses in South Korea. *Evaluation and the Health Professions*, 45(4), 411–419. <https://doi.org/10.1177/01632787221076911>
- Kim, M. S., Cho, Y. O., & Park, J. (2022). Combination relationship between features of person-centered care and patient safety activities of nurses working in small-medium-sized hospitals: A cross-sectional study. *Nursing Reports*, 12(4), 861–872. <https://doi.org/10.3390/nursrep12040083>
- Kunjukunju, A., & Ahmad, A. (2019). Effective communication among doctors and nurses: Barriers as perceived by doctors. *Malaysian Journal of Nursing*, 11(2), 3–11. <https://doi.org/10.31674/mjn.2019.v11i02.001>
- Kwama, A., & Petrucka, P. M. (2021). A literature-based study of patient-centered care and communication in nurse-patient interactions: Barriers, facilitators, and the way forward. *BMC Nursing*, 20(1), 151. <https://doi.org/10.1186/s12912-021-00684-2>
- Li, Y., Wang, X., Zhu, X. R., Zhu, Y. X., & Sun, J. (2019). Effectiveness of problem-based learning on the professional communication competencies of nursing students and nurses: A systematic review. *Nurse Education in Practice*, 37, 45–55. <https://doi.org/10.1016/j.nepr.2019.04.015>
- Mahvar, T., Mohammadi, N., Seyedfatemi, N., & Vedadhir, A. A. (2020). Interpersonal communication among critical care nurses: An ethnographic study. *Journal of Caring Sciences*, 9(1), 57–64. <https://doi.org/10.34172/jcs.2020.009>
- Paddley, B., Espin, S., Indar, A., Rose, D., & Bookey-Bassett, S. (2023). Communication of code status escalation for nurses and physicians in the intensive care unit: A case study. *Canadian Journal of Nursing Research*, 55(2), 176–184. <https://doi.org/10.1177/08445621221099117>
- Ratna, H. (2019). The importance of effective communication in healthcare practice. *Harvard Public Health Review*, 23, 1–6. <https://harvardpublichealthreview.org/the-importance-of-effective-communication-in-healthcare-practice/>
- Sheehan, J., Laver, K., Bhoopi, A., Rahja, M., Usherwood, T., Clemson, L., & Lannin, N. A. (2021). Methods and effectiveness of communication between hospital allied health and primary care practitioners: A systematic narrative review. *Journal of Multidisciplinary Healthcare*, 14, 493–511. <https://doi.org/10.2147/JMDH.S295549>
- Soares, A. K. F., de Sá, C. H. C., Lima, R. da S., Barros, M. da S., & Coriolano-Marinus, M. W. de L. (2022). Communication in health care from the experiences of nursing students and teachers: Contributions to health literacy. *Ciência & Saúde Coletiva*, 27(5), 1753–1762. <https://doi.org/10.1590/1413-81232022275.21462021EN>
- Tiwary, A., Rimal, A., Paudyal, B., Sigdel, K. R., & Basnyat, B. (2019). Poor communication by health care professionals may lead to life-threatening complications: Examples from two case reports. *Wellcome Open Research*, 4, 7. <https://doi.org/10.12688/wellcomeopenres.15042.1>
- Vaz, M., D'Silva, C., Krishna, B., Ramachandran, P., D'Souza, M. C., Mendonca, L., & D'Souza, M. C. (2023). Understanding the challenges of intensive care staff in communicating with patients and patients' families during the COVID-19 crisis: A qualitative exploration. *Cureus*, 15(6), e40961. <https://doi.org/10.7759/cureus.40961>
- White, S. J., Condon, B., Ditton-Phare, P., Dodd, N., Gilroy, J., Hersh, D., & Gilligan, C. (2023). Enhancing effective healthcare communication in Australia and Aotearoa New Zealand: Considerations for research, teaching, policy, and practice. *PEC Innovation*, 3, 100151. <https://doi.org/10.1016/j.pecinn.2023.100151>