



# **QUALITY OF NURSING CARE AMONG THE STUDENT NURSES OF MEDICAL COLLEGES OF NORTHERN PHILIPPINES: A BASIS FOR QUALITY OF NURSING PROGRAM ENHANCEMENT**

Piolo Jose E. Eleydo,  
Jenica B. Fernandez,  
Marimar S. Rodriguez,  
Gia Karla M. Ruiz,  
Raiza Junabeth Ugali, LPT, RN,  
Dorothy Joy Sia, RN,  
Jemima Genobili, RN

## **ABSTRACT**

The study investigates the quality of nursing care provided by student nurses in the Medical Colleges of Northern Philippines. Employing Donabedian's theory, it assesses structural, processual, and outcome components to identify strengths and areas for improvement in nursing education and training programs. The research addresses the persistent theory-practice gap in nursing education, with the ultimate goal of enhancing the overall quality of healthcare delivery in the region. A descriptive-inferential design was utilized, involving level 2, 3, and 4 student nurses from the Medical Colleges of Northern Philippines. Data were collected through structured questionnaires, focusing on respondent profiles (sex, socio-economic status, year level) and the quality of care rendered (effectiveness, safety, patient-centeredness, timeliness, equity, integration, efficiency). Quantitative data analysis included Likert scale ratings, frequency counts, weighted means, and ANOVA to determine significant differences based on respondent profiles. The study revealed varying levels of quality in nursing care across different dimensions. Key findings indicated that student nurses generally provided effective and safe care, with notable strengths in patient-centeredness and timeliness. However, disparities were found in equity and integration of care, highlighting areas requiring targeted improvements. Significant differences in quality assessments were observed when data were grouped according to socio-economic status and year level, suggesting these factors influence care quality. The results underscore the importance of enhancing nursing curricula and clinical training protocols to bridge the theory-practice gap. Recommendations include integrating more simulation-based learning and increasing support for diverse socio-economic backgrounds to ensure equitable and comprehensive training for all student nurses. Continuous quality improvement initiatives are essential to maintain high standards of nursing education and practice. This study provides a comprehensive assessment of the quality of nursing care delivered by student nurses in Northern Philippines, identifying both strengths and areas



for improvement. By leveraging Donabedian's framework, the research offers actionable insights for enhancing nursing education, ultimately contributing to better healthcare outcomes in the region.

**Key words:** *Nursing Care Quality, Nursing Education, Theory-Practice Gap, Clinical Competence, Healthcare Delivery*

## INTRODUCTION

Nurses play a vital role in supporting healthcare systems globally, addressing the complex challenges of patient care, health promotion, and disease prevention. The World Health Organization (2020) projects a need for an additional 10.6 million nurses and midwives by 2030 to meet global healthcare demands. This critical shortage has been further exacerbated by the COVID-19 pandemic, which placed immense physical and emotional strain on healthcare workers, including nurses (Hsu et al., 2022). The growing demand for a skilled and diverse nursing workforce highlights the importance of understanding nursing students' career preferences and motivations, as they represent the future of the profession.

The quality of nursing care is a multifaceted concept that emphasizes a patient-centered approach, prioritizing the preferences, needs, and values of individuals. High-quality nursing care is characterized by its focus on safety, effectiveness through evidence-based practices, efficiency, timeliness, equity, and continuous improvement. Ensuring quality nursing care leads to better patient outcomes, increased satisfaction, and an overall enhanced performance of the healthcare system.

This research specifically investigates the quality of nursing care provided by student nurses at levels two, three, and four in the Medical Colleges of Northern Philippines. This region presents unique cultural diversity and specialized healthcare challenges that influence nursing education and practice.

A significant aspect of this study is addressing the theory-practice gap in nursing education, as highlighted by previous research (Nuuyoma & Ashipala, 2018). This gap often results in clinical practices failing to adequately bridge theoretical knowledge and practical skills. The study aims to thoroughly review and improve the nursing education curriculum at the Medical Colleges of Northern Philippines using Donabedian's theory as a framework.

## METHODOLOGY

This chapter described the research methodology, respondents, sampling procedure, and research tools employed. It also revealed the statistical treatment performed to analyze and interpret the data collected.

### Research Design



This study used a descriptive-inferential quantitative research design. In this study, the descriptive component was involved to collect detailed information about the current quality of nursing care provided by student nurses in Medical Colleges of Northern Philippines. On the other hand, inferential research helped us in analyzing the collected data that enabled us to draw conclusions about the factors influencing the quality of care rendered of student nurses. Lastly, the quantitative approach was utilized to statistically provide numerical insights into the effectiveness of the proposed interventions or recommendations we shared.

### **Respondents of the Study**

Random sampling technique was used to choose a representative subset of the population for investigation. Particularly, stratified random sampling wherein it was an approach that divided a population into subgroups, or strata, depending on specific characteristics and then selected samples at random from each stratum. Our research study, utilized the Slovin's formula for us researchers to know the number of respondents required.

As a result, we have picked 312 nursing students as respondents with the use of stratified random sampling. One hundred-sixty respondents would be coming from the BSN 2<sup>nd</sup> year students, 100 respondents from BSN 3<sup>rd</sup> year students, and 52 BSN 4<sup>th</sup> year students.

### **Data Gathering Tool**

A self-made structured questionnaire based on the guidelines of WHO was utilized. It was utilized to assess the "Quality of Nursing Care Among the Student Nurses of Medical Colleges of Northern Philippines; A Basis for Quality of Nursing Program Enhancement".

The first part was used to gather the demographic profile of the student nurses. While the second part was used to evaluate how student nurses render safe quality care to their patients. A four-point scale was utilized as a mechanism for the quality of nursing care with the following descriptive values: (4-Always; 3-Often; 2-Sometimes; 1-Never).

### **Data Gathering Procedure**

The researchers sought a permission from the Dean of College of Nursing to conduct this study. Furthermore, the researchers also made sure that consent is rendered to the respondents before the conduct of the gathering. This study implemented a survey questionnaire to compile the necessary data.

After the validation and checking of questionnaires, we transferred the questionnaire into the Google Form for easy and accessible distribution. The researchers gathered the Level Representatives coming from 2<sup>nd</sup> to 4<sup>th</sup> year nursing students and shared the G-form link to them and instructed them to send it

into their respective group chats of the different sections and randomly picked 10 students to answer. The researchers monitored the G-form link until all the 312 respondents answered the questionnaire.

Furthermore, the researchers retrieved all the needed responses to be tabulated. The results were then analyzed, interpreted, and summarized by the school statistician and the researchers came up with conclusions and recommendations.

### Data Analysis

The researchers compiled and tabularized all the data to organized the given data by our nursing students. The statistical methods used in processing the data gathered in the study was: Frequency count and percentage distribution was used to analyze the profile variables of the student nurses. While weighted mean was utilized to determine the quality of care rendered by the student nurses. Finally, Analysis of Variance was implemented to know if there is a significant difference in the quality of nursing care of student nurses when they are grouped according to their profile variables.

## RESULTS AND DISCUSSIONS

**Table 1.1. Distribution of the Profile of the Respondents in Terms of Sex**

CATEGORY	FREQUENCY	PERCENTAGE
MALE	55	17.6
FEMALE	257	82.4
TOTAL	312	100.00

The figure implied that male respondents have a percentage of 17.6, while female respondents have an average of 82.4. This means that the majority of respondents are female BSN students who are currently having their Related Learning Experience.

**Table 1.2. Distribution of the Profile of the Respondents in Terms of Socio-Economic Status**

CATEGORY	FREQUENCY	PERCENTAGE
Below 10,727 PHP	184	59.0
10,722 – 21,454 PHP	58	18.6
21,455 – 410 PHP	60	19.2
42,911 – 107,276 PHP	8	2.6
ABOVE 107,276 PHP	2	.6
TOTAL	312	100.00

This table implied that the economic status of the respondents, is characterized as poor.

**Table 1.3. Distribution of the Profile of the Respondents in Terms of Year Level**

CATEGORY	FREQUENCY	PERCENTAGE
II	160	51.3
III	100	32.1
IV	52	16.7
<b>TOTAL</b>	<b>312</b>	<b>100.00</b>

Majority of the respondents are Level II nursing students with a percentage of 51.3. The lowest percentage of 16.7 came from Level IV nursing students. This only implied that most of the respondents are BSN Level II nursing students.

**Table 2.1. Assessment of the Respondents in the Quality of Care Rendered by the Respondents in Terms of Safety**

STATEMENTS	MEAN	DESCRIPTION
Practiced safe surgical care procedures.	3.78	STRONGLY AGREE
2. Practiced safe injections procedures.	3.85	STRONGLY AGREE
3. Prevent medical associated infections.	3.81	STRONGLY AGREE
4. Practiced safe transfusion practices.	3.75	STRONGLY AGREE
5. Engaged patients and families for safer health care.	3.83	STRONGLY AGREE
6. Always ask question/s to the clinical instructor or nurses on duty when in doubt.	3.84	STRONGLY AGREE
7. Carried the 14 rights of drug administration when giving medications.	3.80	STRONGLY AGREE
8. Ensuring patient safety at all times.	3.91	STRONGLY AGREE

9. Keeping patient's record confidential at all times	3.90	STRONGLY AGREE
<b>CATEGORICAL MEAN</b>	<b>3.83</b>	<b>STRONGLY AGREE</b>

A categorical mean of 3.83, which falls under the "Strongly Agree" category, it is evident that respondents practiced and rendered a safe quality of care on their respective area of assignments



during their Related Learning Experience. The highest mean score, at 3.91, corresponds to the statement "*Ensuring patient safety at all times.*" This strong agreement suggests that respondents give importance in preventing harm to their patients by enforcing safety measures such as raising the bed side rails. Conversely, the lowest mean score, though still within the "Strongly Agree" range, is 3.75 for the statement "*Practiced safe transfusion practices.*" While this is still a high level of agreement, it is slightly less compared to other statements.

**Table 2.2. Assessment of the Respondents in the Quality of Care Rendered by the Respondents in Terms of Effectiveness**

STATEMENTS	MEAN	DESCRIPTION
1. Established rapport and therapeutic communication towards my patients and colleagues.	3.83	STRONGLY AGREE
2. Deliver quality patient education while assuring patient concerns and keeping their fears at bay.	3.79	STRONGLY AGREE
3. Conducts regular rounding on patients' wards.	3.77	STRONGLY AGREE
4. Ability to effectively and empathetically communicate with patients.	3.79	STRONGLY AGREE
5. Have a positive working environment.	3.81	STRONGLY AGREE
<b>CATEGORICAL MEAN</b>	<b>3.80</b>	<b>STRONGLY AGREE</b>

With a categorical mean of 3.80, which falls under the "Strongly Agree" category the highest mean score, at 3.83, corresponds to the statement "*Established rapport and therapeutic communication towards my patients and colleagues.*" This strong agreement shows that the student nurses are effective communicators. Conversely, the lowest mean score, though still within the "Strongly Agree" range, is 3.77 for the statement "*Conducts regular rounding on patient's wards.*" According to Altamira et al., 2019, effective nursing care relies heavily on therapeutic communication between the nurse and patient, as it enhances patient outcomes. Conversely, poor nurse-patient communication can



jeopardize patient safety and satisfaction. Nursing students build trust with patients by employing suitable phrases and tones in verbal communication to assess their needs (Baghcheghi N, Kohestani HR, Rezaei K.).

**Table 2.3 Assessment of the Respondents in the Quality of Care Rendered by the Respondents in Terms of Timeliness**

STATEMENTS	MEAN	DESCRIPTION
1. Prepare and give ordered medications on time.	3.88	STRONGLY AGREE
2. Capacity to provide quality care quickly and efficiently when a patient's need is/are recognized.	3.83	STRONGLY AGREE
3. Making measures to ensure that the patient does not have to wait for any concerns to be identified.	3.90	STRONGLY AGREE
4. Maintain time-management of nursing routines during the course of duty.	3.82	STRONGLY AGREE
5. Finish the nurse tasks on-time before the end of the shift.	3.83	STRONGLY AGREE
<b>CATEGORICAL MEAN</b>	<b>3.85</b>	<b>STRONGLY AGREE</b>

"Making measures to ensure that the patient does not have to wait for any concerns to be identified" has the highest mean of 3.90 with a description of strongly agree. However, the statement "Maintain time-management of nursing routines during the course of duty" has the lowest mean of 3.82 with a description of strongly agree. This implies that the categorical mean of 3.85 with a description of strongly agree to the assessment on the quality of care rendered by the respondents in terms of timeliness, the patients will receive interventions promptly to aid in improving health outcomes. Zyoud, 2023 stated that time is regarded as one of the most crucial resources. Effective time management can significantly benefit both individuals and the work environment. Enhancing nurses' time management



skills can boost their well-being and work quality. Additionally, strong time management skills can enhance the quality of patient care.

**Table 2.4. Assessment of the Respondents in the Quality of Care Rendered by the Respondents in Terms of Equitability**

STATEMENTS	MEAN	DESCRIPTION
1. Rendering quality care regardless of the patient's gender identity and socio-economic status.	3.86	STRONGLY AGREE
2. Impart health teachings and interventions in a way that patients can understand clearly.	3.77	STRONGLY AGREE
3. Respecting the patient's decision and rights.	3.87	STRONGLY AGREE
4. Rendering quality care to all patients without bias and with fair treatment to all.	3.84	STRONGLY AGREE
5. Addressing patients concerns and issues with the right attitude without judgement.	3.87	STRONGLY AGREE
<b>CATEGORICAL MEAN</b>	<b>3.84</b>	<b>STRONGLY AGREE</b>

"Making measures to ensure that the patient does not have to wait for any concerns to be identified" has the highest mean of 3.90 with a description of strongly agree. However, the statement "Maintain time-management of nursing routines during the course of duty" has the lowest mean of 3.82 with a description of strongly agree. This implies that the categorical mean of 3.85 with a description of strongly agree to the assessment on the quality of care rendered by the respondents in terms of timeliness, the patients will receive interventions promptly to aid in improving health outcomes. Zyoud, 2023 stated that time is regarded as one of the most crucial resources. Effective time management can significantly benefit both individuals and the work environment. Enhancing nurses' time management skills can boost their well-being and work quality. Additionally, strong time management skills can enhance the quality of patient care.



**Table 2.5. Assessment of the Respondents in the Quality of Care Rendered by the Respondents in Terms of Integrated**

STATEMENTS	MEAN	DESCRIPTION
1. Knows how to manipulate and measure blood pressure using the manual blood pressure apparatus.	3.83	STRONGLY AGREE
2. Effectively place the 12 lead ECG.	3.51	STRONGLY AGREE
3. Demonstrate proper NGT insertion (lavage and gavage)	3.46	STRONGLY AGREE
4. Demonstrate pre-operative measures (aseptic techniques, gloving, sterility, etc.)	3.78	STRONGLY AGREE
5. Perform effective suctioning (ET care)	3.46	STRONGLY AGREE
6. Knowledgeable to operate medical machine (ECG, Cardiac Monitor, IV infusion pump, etc.)	3.49	STRONGLY AGREE
7. Knows how to correctly obtain the patients vital signs.	3.88	STRONGLY AGREE
<b>CATEGORICAL MEAN</b>	<b>3.63</b>	<b>STRONGLY AGREE</b>

The statement "Knows how to correctly obtain the patients vital signs" has the highest mean of 3.88 with a description of strongly agree. However, the statements "Demonstrate proper NGT insertion (lavage and gavage)" and "Perform effective suctioning (ET care)" has the lowest mean of 3.46 with a description of strongly agree. This implies that the categorical mean of 3.63 with a description of strongly agree to the assessment on the quality of care rendered by the respondents in terms of integration will prepare the student nurses in a complex and modern healthcare systems. Measuring



vital signs is essential for clinical assessment, risk evaluation, and preventing patient deterioration (Smith et al., 2017). Assessing vital signs is a standard and critical part of clinical nursing care. Patients admitted to the hospital need assurance that they will receive safe, high-quality care. Neglecting to assess vital signs puts patients at risk, as their clinical deterioration might go unnoticed or be recognized too late for effective medical intervention. This increases the risk of adverse outcomes, especially for patients with a good prognosis. It is crucial to understand why vital signs assessment is sometimes neglected and determine what actions can ensure thorough and consistent evaluations (Elliott & Endacott, 2022).

**Table 2.6. Assessment of the Respondents in the Quality of Care Rendered by the Respondents in Terms of Efficiency**

STATEMENTS	MEAN	DESCRIPTION
1. Embodied with ethical values mandated by the department and rules and laws abided by the affiliating institutions.	3.84	STRONGLY AGREE
2. Formulates an alternative to solve unanticipated situations.	3.78	STRONGLY AGREE
3. Appropriate usage of technology, medical supplies and paraphernalia.	3.79	STRONGLY AGREE
4. Avoiding waste of equipment, supplies, ideas, and energies.	3.81	STRONGLY AGREE
5. Practice proper waste management in the area.	3.83	STRONGLY AGREE
<b>CATEGORICAL MEAN</b>	<b>3.82</b>	<b>STRONGLY AGREE</b>

The statement "Embody with ethical values mandated by the department and rules and laws abided by the affiliating institutions" has the highest mean of 3.84 with a description of strongly agree. However, the statement "Formulates an alternative to solve unanticipated situations" has the lowest mean of 3.78 with a description of strongly agree. This implies that the categorical mean of 3.82 with a description of strongly agree to the assessment on the quality of care rendered by the respondents in terms of



efficiency fosters student nurses influence patient satisfaction, safety, and resource utilization. Poorchangizi et al. (2019) emphasized that nursing is founded on professional ethics and ethical values, which form the basis of nursing practice. It is crucial for nursing educators to understand nursing students' perspectives on the significance of these professional values. This understanding enables educators to employ more effective methods in teaching these values, preparing graduates to make informed decisions and manage ethical challenges in their daily practice. Awareness of professional nursing values among educators and students is essential for ensuring nurses are equipped to provide patient care ethically and professionally.

## CONCLUSION

Based on the results, the student nurses of Medical Colleges of Northern Philippines rendered quality nursing care to their patients on their Related Learning Experiences. The students' constant delivery of excellent care throughout their learning experiences demonstrates their competency, dedication, and commitment to maintaining high nursing practice standards, as well as their effective application of knowledge and skills in delivering great patient care.

## RECOMMENDATIONS

1. To further elevate the quality of care and pave the way for future research advancements, consider these recommendations:
2. Continuous education and training in nursing programs enhance the quality of education and patient care.
3. Establishing mentorship programs for nursing students creates a supportive environment where experienced mentors offer guidance and feedback to enhance students' skills and professional growth.
4. Enhancing student nursing education through feedback involves implementing patient feedback systems for real-time insights and self-assessment tools for personal growth.
5. Expanding community-based clinical experiences for nursing students is essential for holistic development and cultural competence.
6. To enhance nursing education quality, institutions should regularly review and update policies to align with evolving healthcare standards.

## REFERENCES

Agu C.F., Stewart J., McFarlane-Stewart N., Rae T. COVID-19 pandemic effects on nursing education: Looking through the lens of a developing country. *International Nursing Review*. 2021;68(2):153–158. doi: 10.1111/inr.12663.



Alcabedos, M., & Fontanilla, R. (2024). *THE IMPACT OF THE MATERNAL AND CHILD HEALTH CARE PROGRAM IMPLEMENTATION OF MEDICAL COLLEGES OF NORTHERN PHILIPPINES – COLLEGE OF NURSING IN SAN ISIDRO, IGUIG, CAGAYAN: A PROGRAM EVALUATION: Reproductive Health, Maternal and Child Health Care, Nutrition, Prenatal Care, Postnatal Care.* <https://journal.mcnp.edu.ph/index.php/bsnm/article/view/15>

Alshammari, M., Duff, J., & Guilhermino, M. (2019, December 1). Barriers to nurse–patient communication in Saudi Arabia: an integrative review. *BMC Nursing.* <https://doi.org/10.1186/s12912-019-0385-4>

Appiah, S. Quality of nursing education programme in the Philippines: faculty members perspectives. *BMC Nurs* 19, 110 (2020). <https://doi.org/10.1186/s12912-020-00508-9>

Baghcheghi N, Koohestani HR, Rezaei K. A comparison of the cooperative learning and traditional learning methods in theory classes on nursing students' communication skill with patients at clinical settings. *Nurse Educ Today.* 2011;31(8):877–82. doi: 10.1016/j.nedt.2011.01.006.

Bjørnelv, G. M. W., Edwin, B., Fretland, Å. A., Deb, P., & Aas, E. (2020). *Till death do us part: the effect of marital status on health care utilization and costs at end-of-life. A register study on all colorectal cancer decedents in Norway between 2009 and 2013.* *BMC health services research*, 20(1), 1-13.

Centers for Disease Control and Prevention [CDC] *Timing of state and territorial COVID-19 stay at-home orders and changes in population movement: United States, March 1–May 31, 2020.* 2020, September 3. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6935a2.htm>

Cheryl McKay (2021). *Clinical Integration Best Practices for Improved Patient Care.*

Clinical Integration Best Practices for Improved Patient Care TigerConnect <https://tigerconnect.com/blog/clinical-integration-best-practices-for-improved-patient-care/>

Cleary, P. D. (2016). Evolving concepts of patient-centered care and the assessment of patient care experiences: Optimism and opposition. *Journal of Health Politics, Policy and Law*, 41(4), 675–696. 10.1215/03616878-3620881

Danielle Gagnon (2023). *What is Quality Improvement in Healthcare? What is Quality Improvement in Healthcare?* | SNHU <https://www.snhu.edu/about-us/newsroom/health/what-is-quality-improvement-in-healthcare>

Dapaah, J. M. (2016, January 1). Attitudes and Behaviours of Health Workers and the Use of HIV/AIDS Health Care Services. *Nursing Research and Practice.* <https://doi.org/10.1155/2016/5172497>

Elliott, M., & Endacott, R. (2022, July 4). The clinical neglect of vital signs' assessment: an emerging patient safety issue? *Contemporary Nurse.* <https://doi.org/10.1080/10376178.2022.2109494>

Erdem, D. T., & Bahar, A. (2022, August 29). The Learning Effects of Flipped Classroom Model on Nursing Student's Vital Signs Skills: A Quasi-Experimental Study. *İstanbul Gelişim Üniversitesi Sağlık Bilimleri Dergisi.* <https://doi.org/10.38079/igusabder.1066201>

Fontanilla, R. C., Catuiza, F. L., Nano, A. B., & Adaya, A. V. (2023). Nutritional Status to Academic Performance of The School-Aged Children: A Basis for Inter-Collaborative Extension Services Program. *The Seybold Report ISSN*, 1533-9211

Fontanilla, R., Mandac, R. G., Michael, U. J., Florentino, J., & Paracad, N. A. B. (2023). Department of Health Programs: The Perspective of a Geographically Isolated and Disadvantaged Area of Peñablanca, Cagayan. *Herculean Journal*, 1(1).

Fontanilla, R. (2023). Nourishing Minds: A literature review on the link of nutrition, academic engagement, and student success. *herculeanjournal.com.* <https://doi.org/10.17605/2zdprd70>

Ghofrani, M., Valizadeh, L., Zamanzadeh, V., Ghahramanian, A., Janati, A., & Taleghani, F. (2024). Adapting the Donabedian model in undergraduate nursing education: a modified Delphi study. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-05187-7>



Gradišnik, M., Fekonja, Z., & Vrbnjak, D. (2024, January 1). *Nursing students' handling patient safety incidents during clinical practice: A retrospective qualitative study.* *Nurse Education Today.* <https://doi.org/10.1016/j.nedt.2023.105993>

Hinkler J.L. & Cheever K.H., 2017, *Brunner and Suddarth's textbook of medical-surgical nursing*, 14th edn., Lippincott Williams & Wilkins, Wolters Kluwer, Amsterdam.