

Competence, Clinical Exposure and Culturally Responsive Healthcare Alignment among Nursing Students

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Abstract

Culturally responsive care is essential to equitable nursing practice, particularly in settings where students encounter patients with diverse cultural beliefs, languages, and health practices. This study determined the levels of nursing students' cultural competence, clinical exposure, and alignment with system-level indicators of culturally responsive healthcare, and examined their relationships and predictors. A quantitative descriptive-correlational design was employed among 197 second-, third-, and fourth-year Bachelor of Science in Nursing students at Central Mindanao University selected through proportionate stratified random sampling. A structured questionnaire assessed cultural awareness, cultural knowledge, cultural skills, curriculum integration, clinical practicum experience, participation in workshops/seminars, patient-centered communication, equity in healthcare delivery, and compliance with national/institutional standards. Data were analyzed using mean, standard deviation, Pearson correlation, and multiple linear regression. Students demonstrated high overall cultural competence ($M = 4.382$, $SD = 0.666$), with cultural awareness rated very high ($M = 4.673$). Clinical exposure was high overall ($M = 3.960$, $SD = 0.853$), although participation in workshops/seminars was only moderate ($M = 3.182$). Healthcare alignment was high ($M = 4.461$, $SD = 0.620$), with equity in healthcare delivery receiving the highest rating ($M = 4.822$). All competence and exposure dimensions were significantly and positively correlated with healthcare alignment ($r = .416$ to $.624$, all $p < .001$). The regression model was significant, $F = 30.727$, $p < .001$, explaining 60.8% of the variance in alignment. Clinical practicum experience was the strongest predictor ($\beta = .287$), while cultural knowledge was not an independent significant predictor. The findings support strengthening culturally diverse clinical placements, curriculum integration, structured reflection, and continuing cultural competence training in nursing education.

Keywords: *cultural competence; clinical exposure; culturally responsive healthcare; nursing education; healthcare equity*

1. Introduction

Cultural responsiveness has become an essential dimension of quality nursing care because healthcare professionals increasingly serve patients whose beliefs, languages, family structures, and health practices differ from their own. In the Philippine setting, the presence of numerous ethnolinguistic and indigenous communities makes cultural competence especially relevant to patient safety, trust, communication, and equitable access to care. National and international frameworks consequently emphasize care that is respectful, inclusive, patient-centered, and responsive to cultural differences (Department of Health [DOH], 2023; World Health Organization [WHO], 2022).

Nursing students are future frontline healthcare professionals whose educational preparation and clinical experiences shape their readiness to provide culturally appropriate care. Cultural competence extends beyond technical proficiency and involves awareness of one's own assumptions, knowledge of diverse health beliefs, and skills for culturally respectful assessment and communication. Campinha-Bacote's Process of Cultural Competence conceptualizes competence as an ongoing developmental process strengthened through awareness, knowledge, skills, encounters, and desire (Campinha-Bacote, 2002). In parallel, Donabedian's structure-process-outcome model provides a systems perspective for understanding how educational structures and clinical processes may translate into quality outcomes, including alignment with culturally responsive healthcare standards (Donabedian, 1988).

Clinical exposure is a particularly important mechanism for translating cultural concepts into practice. Structured clinical placements, community immersion, simulation, mentoring, and reflective learning allow students to encounter culturally diverse situations and adapt care accordingly. Previous studies reported that simulation and reflection can strengthen cultural awareness (Fealy et al., 2022), while diverse clinical placements can improve cultural skills and adaptability (Almeida et al., 2024). Philippine studies likewise emphasize community immersion and curriculum integration as important opportunities for developing culturally responsive nursing behaviors (Balabagno et al., 2020; Reyes & Dela Cruz, 2024).

Despite the inclusion of cultural concepts in nursing curricula, a gap may persist between theoretical knowledge and actual culturally responsive practice. Students may value respect and equity yet have unequal exposure to culturally diverse placements, formal cultural competence workshops, or policy frameworks. This gap is especially important in Bukidnon, where nursing students may encounter indigenous, rural, and culturally diverse populations during community and clinical rotations. Examining both competence and exposure therefore provides a more complete picture of students' preparedness than assessing knowledge alone.

This study determined the level of nursing students' competence in terms of cultural awareness, cultural knowledge, and cultural skills; assessed the extent of clinical exposure through curriculum integration, clinical practicum experience, and participation in workshops/seminars; and measured alignment with patient-centered communication, equity in healthcare delivery, and compliance with national/institutional standards. It further examined the relationships among these dimensions and identified which variables significantly predicted culturally responsive healthcare alignment. The study hypothesized that competence and clinical exposure would be significantly associated with and predictive of healthcare alignment.

2. Materials and Methods

Research Design and Setting

The study used a quantitative descriptive-correlational design. The descriptive component summarized nursing students' levels of cultural competence, clinical exposure, and culturally responsive healthcare alignment, while the correlational component examined the relationships among these variables and the extent to which competence and exposure predicted alignment. The study was conducted at Central Mindanao University (CMU) in Musuan, Maramag, Bukidnon, Philippines. The nursing program provides hospital- and community-based learning experiences, including exposure to rural and culturally diverse populations.

Participants and Sampling

The population consisted of 401 eligible Bachelor of Science in Nursing students enrolled during Academic Year 2024–2025: 140 second-year, 125 third-year, and 136 fourth-year students. Second- to fourth-year students were included because they had already undertaken nursing coursework and clinical exposure relevant to the study variables. Using the Raosoft sample size calculator with a 95% confidence level, 5% margin of error, and 50% response distribution, a sample of 197 students was obtained. Proportionate stratified random sampling allocated 69 respondents from the second year, 61 from the third year, and 67 from the fourth year. Within each stratum, students were selected through simple random sampling.

Research Instrument

Data were collected using a structured questionnaire composed of three sections. The first section was adapted from the Inventory for Assessing the Process of Cultural Competence Among Healthcare Professionals–Student Version (IAPCC-SV) and measured cultural awareness, cultural knowledge, and cultural skills. The second section was researcher-developed in relation to CHED Memorandum Order No. 15, Series of 2017 and assessed curriculum integration, clinical practicum experience, and participation in workshops/seminars. The third section was adapted from the National Standards for Culturally and Linguistically Appropriate Services (CLAS) and assessed patient-centered communication, equity in healthcare delivery, and compliance with national/institutional standards. The adapted IAPCC-SV has documented internal consistency in prior applications (Rasoal et al., 2021), while the researcher-developed items underwent expert review. The full instrument was pilot-tested among 30 nursing students from a non-participating school to assess clarity and reliability.

Items were rated on a five-point Likert scale. Mean scores from 4.51–5.00 were interpreted as very high, 3.51–4.50 as high, 2.51–3.50 as moderate/moderately high, 1.51–2.50 as low, and 1.00–1.50 as very low. These ranges were applied consistently to the study variables in the present journal-format report.

Data Gathering and Ethical Procedures

Data collection was undertaken after ethical review and institutional permission. Participants were oriented regarding the study purpose, procedures, potential risks and benefits, and their rights. Participation was voluntary, written informed consent was obtained, and respondents could withdraw without academic penalty. Questionnaires were self-administered using printed copies or a secured online platform, depending on accessibility. No identifying information was collected. Responses were coded, stored securely, and treated confidentially. The data-gathering period covered approximately three to four weeks.

Data Analysis

Means and standard deviations were used to summarize cultural competence, clinical exposure, and healthcare alignment. Pearson product-moment correlation tested the strength and direction of associations between each competence/exposure dimension and healthcare alignment. Multiple linear regression determined which dimensions independently predicted healthcare alignment and the proportion of variance explained by the combined model. Statistical significance was evaluated at the .05 level.

3. Results

The findings are presented according to the study objectives: cultural competence, clinical exposure, healthcare alignment, correlations with alignment, and the multivariable prediction model.

Table 1

Level of Cultural Competence Among Nursing Students

Dimension	Mean	SD	Interpretation
Cultural Awareness	4.673	0.543	Very High
Cultural Knowledge	4.181	0.740	High
Cultural Skills	4.292	0.715	High
Overall	4.382	0.666	High

Nursing students demonstrated a high overall level of cultural competence ($M = 4.382$, $SD = 0.666$). Cultural awareness was the strongest dimension and was rated very high ($M = 4.673$), while cultural knowledge ($M = 4.181$) and cultural skills ($M = 4.292$) were both high.

Table 2

Extent of Clinical Exposure Related to Cultural Competence

Dimension	Mean	SD	Interpretation
Curriculum Integration	4.259	0.820	High
Clinical Practicum Experience	4.439	0.650	High
Participation in Workshops/Seminars	3.182	1.090	Moderate
Overall	3.960	0.853	High

Clinical exposure was high overall ($M = 3.960$, $SD = 0.853$). Clinical practicum experience obtained the highest mean ($M = 4.439$), followed by curriculum integration ($M = 4.259$). Participation in workshops and seminars was notably lower and was rated only moderate ($M = 3.182$).

Table 3

Alignment With System-Level Indicators of Culturally Responsive Healthcare

Dimension	Mean	SD	Interpretation
Patient-Centered Communication	4.625	0.560	Very High
Equity in Healthcare Delivery	4.822	0.417	Very High

Compliance With National/Institutional Standards	3.935	0.884	High
Overall	4.461	0.620	High

The overall level of culturally responsive healthcare alignment was high ($M = 4.461$, $SD = 0.620$). Equity in healthcare delivery received the highest rating ($M = 4.822$), followed by patient-centered communication ($M = 4.625$); both were very high. Compliance with national/institutional standards was high but comparatively lower ($M = 3.935$).

Table 4

Correlations Between Competence/Clinical Exposure and Healthcare Alignment

Variable	r	p	Interpretation
Cultural Awareness	.494	< .001	Moderate positive, significant
Cultural Knowledge	.416	< .001	Moderate positive, significant
Cultural Skills	.583	< .001	Strong positive, significant
Curriculum Integration	.602	< .001	Strong positive, significant
Clinical Practicum Experience	.624	< .001	Strong positive, significant
Participation in Workshops/Seminars	.434	< .001	Moderate positive, significant

All competence and exposure dimensions were significantly and positively associated with healthcare alignment. Clinical practicum experience showed the strongest correlation ($r = .624$, $p < .001$), followed by curriculum integration ($r = .602$, $p < .001$) and cultural skills ($r = .583$, $p < .001$). Cultural awareness, workshops/seminars, and cultural knowledge also demonstrated significant moderate positive relationships.

Table 5

Multiple Linear Regression Predicting Culturally Responsive Healthcare Alignment

Predictor	B	β	t	p	Result
Cultural Awareness	.277	.280	3.996	< .001	Significant
Cultural Knowledge	-.073	-.102	-1.386	.168	Not significant
Cultural Skills	.134	.194	2.514	.013	Significant
Curriculum Integration	.115	.221	2.761	.007	Significant
Clinical Practicum Experience	.221	.287	3.757	< .001	Significant
Workshops/Seminars	.077	.200	2.813	.006	Significant

Model summary: $R = .780$; $R^2 = .608$; *Adjusted* $R^2 = .588$; $F = 30.727$; $p < .001$.

The regression model was statistically significant and explained 60.8% of the variance in healthcare alignment. Clinical practicum experience was the strongest independent predictor ($\beta = .287$, $p < .001$), followed closely by cultural awareness ($\beta = .280$, $p < .001$). Curriculum integration ($\beta = .221$, $p = .007$),

participation in workshops/seminars ($\beta = .200$, $p = .006$), and cultural skills ($\beta = .194$, $p = .013$) were also significant predictors. Cultural knowledge was significantly correlated with alignment at the bivariate level but did not remain a significant independent predictor in the multivariable model ($\beta = -.102$, $p = .168$).

4. Discussion

The results indicate that nursing students already possess a strong foundation in cultural competence, with cultural awareness emerging as the highest-rated dimension. This suggests that respondents are highly conscious of cultural differences and the importance of respecting patients' beliefs and values. The finding is consistent with evidence showing that reflection, simulation, and exposure to diverse cultural situations can strengthen students' awareness and sensitivity (Fealy et al., 2022). High awareness is an important starting point because culturally responsive care requires students to recognize how their own assumptions may influence communication and clinical decision-making.

Although cultural knowledge and cultural skills were both high, they did not reach the very high level observed for awareness. This pattern suggests that recognizing diversity may develop more readily than acquiring the detailed knowledge and applied skills needed for culturally adapted assessment and intervention. The finding is compatible with studies in which structured training and diverse clinical placements were associated with stronger cultural knowledge and skills (Dobrek et al., 2023; Almeida et al., 2024). It therefore remains important for nursing curricula to move beyond attitudinal awareness toward repeated opportunities for application.

Clinical exposure was also high, with clinical practicum experience receiving the strongest rating. This result demonstrates the central role of hands-on clinical encounters in cultural learning. Students develop competence not only by discussing cultural concepts in the classroom but also by communicating with real patients, families, and communities whose health beliefs and practices may differ from their own. This interpretation supports Campinha-Bacote's emphasis on cultural encounters and evidence describing experiential learning as a driver of culturally responsive nursing practice (Campinha-Bacote, 2002; Reyes & Dela Cruz, 2024).

In contrast, participation in workshops and seminars was only moderate. This is a meaningful educational gap because workshops, webinars, and intercultural forums can supplement routine clinical exposure with focused content on indigenous health beliefs, language barriers, cultural safety, and formal standards. The lower rating suggests that students may have fewer structured opportunities outside regular coursework and clinical duties. Expanding such activities could provide a deliberate venue for reflection, dialogue, and policy-oriented learning.

Healthcare alignment was high overall, and the very high ratings for equity in healthcare delivery and patient-centered communication indicate strong student endorsement of fairness, respect, and culturally appropriate interaction. These findings are consistent with the central goals of culturally responsive care and with patient-centered communication literature emphasizing empathy, active listening, and respect (Kwame & Petrucka, 2021). However, compliance with national and institutional standards was comparatively lower. This suggests that students may practice respectful and equitable behaviors while still needing stronger familiarity with formal policies and frameworks such as the CLAS standards, CHED requirements, and institutional cultural safety procedures.

The correlation analysis provides strong evidence that competence and exposure are related to system-level alignment. The strongest relationships involved clinical practicum experience, curriculum integration, and cultural skills. These findings indicate that healthcare alignment is most closely associated with what students repeatedly practice and apply, rather than with knowledge alone. This pattern is consistent with the study's conceptual integration of Campinha-Bacote and Donabedian: educational structures and clinical processes contribute to the development of competence, which is then reflected in culturally responsive behaviors and standards.

The regression findings sharpen this interpretation. The combined predictors explained 60.8% of the variance in healthcare alignment, indicating substantial explanatory power. Clinical practicum experience emerged as the strongest predictor, followed by cultural awareness. Curriculum integration, workshops/seminars, and cultural skills also contributed independently. Cultural knowledge, although positively correlated with alignment, did not remain significant after the other dimensions were considered simultaneously. A reasonable interpretation is that factual knowledge may overlap with, or become influential through, awareness, skills, and applied clinical experiences. Thus, knowledge remains necessary but may not be sufficient by itself to produce system-aligned culturally responsive practice.

The findings have direct implications for nursing education and clinical training. Nursing schools can strengthen culturally diverse clinical placements, use structured post-clinical debriefing, integrate cultural competence across nursing courses rather than confining it to a single topic, and provide regular workshops involving indigenous leaders, community representatives, and healthcare practitioners. Formal instruction on cultural safety policies, CLAS-related principles, and national or institutional standards may also address the lower compliance score. Simulation and case-based exercises can further help students translate cultural knowledge into decisions and communication behaviors.

Study Limitations

The study used self-reported measures, which may be affected by social desirability and may not fully represent actual bedside behavior. It was conducted in a single university in Bukidnon, limiting generalizability to other nursing schools and regions. The cross-sectional descriptive-correlational design also does not establish causal relationships. In addition, the study focused on students and did not include clinical instructors, practicing nurses, patients, or community members who could provide complementary assessments of culturally responsive practice.

5. Conclusion

Nursing students demonstrated high cultural competence, high clinical exposure, and high alignment with system-level indicators of culturally responsive healthcare. Their strongest attributes were cultural awareness, clinical practicum experience, patient-centered communication, and equity in healthcare delivery. Participation in workshops/seminars and familiarity with formal standards represented comparatively weaker areas. All dimensions of competence and exposure were positively associated with healthcare alignment, and the regression model explained 60.8% of its variance. Clinical practicum experience was the strongest predictor, confirming the importance of authentic, supervised, and culturally diverse clinical learning. The findings further show that theoretical knowledge alone does not independently guarantee alignment; effective cultural competence is strengthened when knowledge is translated through awareness, skills, interaction, reflection, and institutional support.

Recommendations

- Strengthen clinical practicum programs by ensuring exposure to culturally diverse, rural, indigenous, and underserved populations, accompanied by guided reflection and debriefing.
- Integrate cultural competence across nursing subjects and explicitly teach relevant national, institutional, and culturally and linguistically appropriate care standards.
- Increase accessible workshops, seminars, and webinars on cultural competence, indigenous health beliefs, intercultural communication, and health equity.
- Use simulation, case-based learning, and reflective activities to help students translate cultural knowledge into clinical skills and decision-making.
- Encourage healthcare training affiliates to provide culturally appropriate resources, orientation, and communication support during clinical placements.
- Conduct longitudinal, multi-institutional, and outcome-based studies that include direct observation, patient perspectives, or clinical performance measures.

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