


The Influence of Clinical Leadership on Nurses' Cultural Competence in Reducing Patient Anxiety in the Inpatient Ward of Nurul Hasanah Hospital

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Article Info	ABSTRACT
<p>Keywords: Clinical leadership, Cultural competence, Patient anxiety, Nursing, Inpatient care.</p>	<p>Healthcare services in Indonesia, as a multicultural country, face challenges in providing culturally sensitive nursing care. Clinical leadership plays a crucial role in developing nurses' cultural competence to reduce patient anxiety, which can influence the healing process. This study aimed to examine the influence of clinical leadership on nurses' cultural competence and its role in reducing patient anxiety in the inpatient ward of Nurul Hasanah Hospital. This study employed a quantitative cross-sectional design, involving 120 nurses and 150 patients selected through purposive sampling. Data were collected using the Clinical Leadership Survey, Intercultural Competence Scale in Nursing, and State-Trait Anxiety Inventory (STAI). Data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS). The results showed that clinical leadership was rated high (mean = 3.82), cultural competence moderate (mean = 3.45), and patient anxiety moderate (mean = 42.8). Clinical leadership had a positive effect on cultural competence ($\beta = 0.687, p < 0.001$) and a negative effect on patient anxiety ($\beta = -0.214, p = 0.004$). Cultural competence negatively affected patient anxiety ($\beta = -0.478, p < 0.001$) and partially mediated the relationship between clinical leadership and patient anxiety ($\beta = -0.328, p < 0.001$). Clinical leadership effectively reduces patient anxiety both directly and indirectly by enhancing nurses' cultural competence. Strengthening clinical leadership and cultural competence may contribute to more culturally responsive and psychologically safe inpatient care.</p>
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INTRODUCTION

Healthcare services in the era of globalization face increasingly complex challenges, including growing demands for patient-centered care that is culturally sensitive. According to Pelasoja et al. (2025), nurses with effective leadership abilities can promote the adaptation of cultural diversity among patients in healthcare facilities. Cadmus et al. (2024) argue that leadership in nursing is a blend of art and science involving the setting of direction (vision/mission),

influencing and empowering teams, and fostering a culture of excellence and equity in service delivery. Therefore, strengthening the role of clinical leadership is a key strategy in enhancing the effectiveness and quality of nursing services.

Clinical leadership in nursing plays a fundamental role in creating a work environment that supports the development of nurses' professional competencies (Yusnaini et al., 2021). Effective clinical leaders are not only responsible for administrative tasks but also serve as mentors, facilitators, and role models in evidence-based nursing practice (Al Anwer Ashour, Banakhar and Elseesy, 2022). According to Teixeira et al. (2023), clinical leadership is crucial in developing specific nursing competencies, including cultural competence to deliver inclusive and patient-centered care.

Cultural competence in nursing refers to the ability of nurses to provide effective and sensitive care that meets the cultural needs of diverse patients (Osmancevic, Großschädl and Lohrmann, 2023). According to Liu et al. (2022) explain that cultural competence includes self-awareness of one's own culture, knowledge of other cultures, skills in cross-cultural interactions, and the ability to adapt nursing practices to align with patients' cultural values. Prosen & Licen (2023) highlight that the development of nurses' cultural competence is critical in the context of modern healthcare, which prioritizes patient-centered care and cultural safety. However, the lack of cultural competence in nursing practice can lead to misunderstandings and discomfort, ultimately increasing patient anxiety during hospitalization.

Patient anxiety during hospitalization is a universal phenomenon that can influence the healing process and overall health outcomes. Gheshlaghi et al. (2021) found that excessive anxiety negatively affects treatment outcomes in major surgical patients. Similarly, Alzahrani (2021) reported that inpatients often struggle to adapt to hospital environments, contributing to heightened symptoms of depression and anxiety. In addition, language barriers and cultural differences may result in confusion, insecurity, and increased anxiety during hospital stays (Alkhaled *et al.*, 2022). When left unaddressed, patient anxiety can lead to prolonged hospitalizations, more complications, and decreased patient satisfaction with the care provided.

Nurul Hasanah Kutacane Hospital, as a healthcare facility serving a culturally diverse population, faces the challenge of ensuring that all nursing staff possess adequate cultural competence. Preliminary observations indicate variability in the level of nurses' cultural competence, which may affect communication quality with patients, understanding of their spiritual and cultural needs, and the ability to provide effective emotional support to reduce anxiety.

Previous studies have identified various factors influencing nurses' cultural competence, including education, work experience, and exposure to cultural diversity. However, the role of clinical leadership in developing nurses' cultural competence remains underexplored—especially in relation to patient outcomes such as anxiety levels. A comprehensive understanding of this relationship is essential to develop effective leadership strategies for improving the quality of nursing care. This study is particularly relevant given the growing emphasis in hospital accreditation on patient safety, satisfaction, and quality of patient-

centered care. International accreditation standards such as those from the Joint Commission International (JCI) and Indonesia's Hospital Accreditation Commission (KARS) require cultural competence in nursing practice as an indicator of service quality.

Based on this background, this study aims to analyze the influence of clinical leadership on nurses' cultural competence in reducing patient anxiety in the inpatient ward of Nurul Hasanah Hospital in Kutacane. The results of this research are expected to provide strategic recommendations for hospital management to optimize the role of clinical leadership as a catalyst in developing nurses' cultural competence, thereby contributing to improved quality of nursing care and increased patient satisfaction.

METHODS

This study employed a quantitative design with a cross-sectional approach to analyze the relationship between clinical leadership, nurses' cultural competence, and patients' anxiety levels in the inpatient ward of Nurul Hasanah Hospital, Kutacane. The cross-sectional approach was selected because it enables researchers to collect data at a single point in time, allowing efficient identification of relationships between variables. This design also allows for the simultaneous measurement of the independent variable (clinical leadership), the mediating variable (nurses' cultural competence), and the dependent variable (patient anxiety) to test the proposed causal model.

The study population consisted of all nurses working in the inpatient wards of Nurul Hasanah Hospital and the patients admitted to these wards during the study period. A purposive sampling technique was used. The inclusion criteria for nurses were: a minimum of a Diploma in Nursing (D3), at least one year of experience in the inpatient ward, and willingness to participate in the study. For patients, the inclusion criteria were: aged 18–65 years, hospitalized for at least three days, fully conscious (GCS = 15), and not diagnosed with major psychiatric disorders. Based on Slovin's formula with a 5% margin of error, the final sample included 120 nurses and 150 patients who met the inclusion and exclusion criteria.

The study utilized three validated questionnaires, adapted into Indonesian. Clinical leadership was measured using the Clinical Leadership Survey (CLS), consisting of 41 items on a 5-point Likert scale covering the dimensions of vision and purpose, inspiration and motivation, challenge and support, recognition and reward, and management and monitoring (Carlson *et al.*, 2021). Nurses' cultural competence was measured using the Intercultural Competence Scale in Nursing (ICSN), which contains 21 items on a 4-point Likert scale, covering the dimensions of cultural awareness, cultural knowledge, cultural communication skills, and cultural sensitivity (Chen *et al.*, 2024). Patient anxiety was measured using the State-Trait Anxiety Inventory (STAI), comprising 40 items on a 4-point Likert scale, divided into state anxiety and trait anxiety (Thomas and Cassidy, 2021). All instruments were previously tested for validity and reliability, with Cronbach's alpha values exceeding 0.8.

Data collection was conducted over three months and involved a research team to ensure consistency throughout the data-gathering process. Data on clinical leadership and cultural competence were collected via questionnaires, while patient anxiety data were gathered through structured interviews conducted by the researchers. Prior to data collection,

participants received a comprehensive explanation of the study's purpose, procedures, benefits, and potential risks. Informed consent was obtained from all participants. This study was approved by the Health Research Ethics Committee of Universitas Nurul Hasanah Kutacane, with protocol number 432/UNH.A/KEP/VII/2024.

Data analysis was performed using SPSS software, employing both descriptive and inferential statistics. Descriptive analysis was used to describe participant characteristics and variable distributions. The Kolmogorov-Smirnov test was used to assess data normality, and Levene's test was used for homogeneity. Inferential analysis was conducted using Structural Equation Modeling (SEM) with Partial Least Squares (PLS) to examine the structural model of the relationship between clinical leadership, nurses' cultural competence, and patient anxiety. Mediation analysis was performed to test the role of nurses' cultural competence as a mediator between clinical leadership and patient anxiety. A significance level of $\alpha = 0.05$ and a 95% confidence interval were applied.

RESULTS AND DISCUSSION

Results

Table 1. Demographic Characteristics of Nurse Respondents (n=120)

Characteristic	Category	Frequency (f)	Percentage (%)
Age	25–30 years	45	37.5
	31–35 years	38	31.7
	36–40 years	25	20.8
	>40 years	12	10.0
Gender	Female	89	74.2
	Male	31	25.8
Education	Diploma in Nursing	72	60.0
	Bachelor's + Ners	48	40.0
Work Experience	< 2 years	58	48.3
	2–3 years	35	29.2
	3–4 years	19	15.8
	> 4 years	8	6.7

Table 1 shows that most nurses were aged 25–35 years (69.2%), predominantly female (74.2%), held a diploma in nursing (60.0%), and had less than 2 years of work experience (48.3%) in the inpatient unit of Nurul Hasanah Hospital.

Table 2. Demographic Characteristics of Patient Respondents (n=150)

Characteristic	Category	Frequency (f)	Percentage (%)
Age	18–30 years	35	23.3
	31–40 years	42	28.0
	41–50 years	38	25.3
	51–65 years	35	23.3
Gender	Female	82	54.7

Characteristic	Category	Frequency	Percentage
		(f)	(%)
Education	Male	68	45.3
	Primary School	28	18.7
	Junior High School	35	23.3
	Senior High School	52	34.7
	University	35	23.3
Length of Stay	3–5 days	105	70.0
	6–10 days	45	30.0
Ethnicity	Alas	52	34.7
	Gayo	38	25.3
	Batak	32	21.3
	Minangkabau	18	12.0
	Javanese	10	6.7

Table 2 shows that patient respondents had a relatively even age distribution (18–65 years), were mostly female, and had a high school education. Most patients were hospitalized for 3–5 days, with the largest ethnic group being Alas in the inpatient ward of Nurul Hasanah Hospital.

Table 3. Descriptive Statistics of Research Variables

Variable	Category	Frequency	Percentage	Mean	SD	Min	Max
		(f)	(%)				
Clinical Leadership	Low	8	6.7	3.82	0.64	2.15	4.95
	Moderate	45	37.5				
	High	67	55.8				
Cultural Competence	Low	12	10.0	3.45	0.58	2.22	4.78
	Moderate	71	59.2				
	High	37	30.8				
Patient Anxiety	Low	45	30.0	42.8	8.65	28	67
	Moderate	89	59.3				
	High	16	10.7				

Table 3 shows that clinical leadership was rated high (mean = 3.82, SD = 0.64), with 55.8% of nurses reporting high levels. Cultural competence was rated moderate (mean = 3.45, SD = 0.58), with 59.2% of nurses in this category. Patient anxiety was also at a moderate level (mean = 42.8, SD = 8.65), with 59.3% of patients experiencing moderate anxiety in the inpatient unit of Nurul Hasanah Hospital.

Table 4. Correlation Between Variables

Variable	1	2	3
Clinical Leadership	1		
Nurse Cultural Competence	0.687	1	
Patient Anxiety	-0.542	-0.624	1

Table 4 shows significant relationships among all variables. Clinical leadership had a strong positive correlation with nurses' cultural competence ($r = 0.687$, $p < 0.01$), indicating

that better clinical leadership is associated with higher cultural competence. Clinical leadership was moderately and negatively correlated with patient anxiety ($r = -0.542, p < 0.01$), suggesting that good leadership contributes to reducing patient anxiety. Nurse cultural competence was strongly and negatively correlated with patient anxiety ($r = -0.624, p < 0.01$), indicating that culturally competent nurses are more effective in reducing anxiety.

Table 5. Results of Structural Equation Modeling (SEM-PLS)

Pathway	Coefficient (β)	t-value	p-value
Clinical Leadership → Cultural Competence	0.687	12.458	<0.001
Clinical Leadership → Patient Anxiety	-0.214	2.847	0.004
Cultural Competence → Patient Anxiety	-0.478	6.329	<0.001
Indirect Effect:			
Clinical Leadership → Cultural Competence → Anxiety	-0.328	5.672	<0.001

Table 5 presents SEM-PLS results, showing all path coefficients were statistically significant ($p < 0.05$). Clinical leadership positively affected cultural competence ($\beta = 0.687, p < 0.001$), directly and negatively affected patient anxiety ($\beta = -0.214, p = 0.004$), and cultural competence negatively affected patient anxiety ($\beta = -0.478, p < 0.001$). The indirect effect of clinical leadership on anxiety through cultural competence was also significant ($\beta = -0.328, p < 0.001$). Since the direct effect remained significant after adding the mediator, cultural competence is confirmed as a partial mediator in the relationship between clinical leadership and patient anxiety.

Discussion

Table 5 shows that clinical leadership has a positive effect on cultural competence ($\beta = 0.687, p < 0.001$), a direct negative effect on patient anxiety ($\beta = -0.214, p = 0.004$), and that cultural competence has a negative effect on patient anxiety ($\beta = -0.478, p < 0.001$). The indirect effect of clinical leadership on patient anxiety through cultural competence was also statistically significant ($\beta = -0.328, p < 0.001$). Therefore, clinical leadership influences nurses' cultural competence in reducing patient anxiety in the inpatient ward of Nurul Hasanah Hospital. This finding is consistent with previous studies that have explored the relationship between clinical leadership, nurses' cultural competence, and patient anxiety. Teixeira et al. (2024) emphasized that transformational leadership by nurse managers supports the development of cultural and communicative competence in multicultural nursing teams. Liu et al. (2022) found that nurses with high cultural competence including communication skills and cultural sensitivity can improve the quality of care and patient trust, which in turn positively impacts patients' emotional states. Guibert-Lacasa & Vázquez-Calatayud (2022) reported that structured clinical leadership interventions not only enhance nurses' ability to provide culturally responsive care but also directly reduce patient anxiety by improving therapeutic communication and cultural empathy in India.

Clinical leadership by head nurses plays a key role in decision-making to enhance nurses' cultural competence through various strategic mechanisms that contribute to reduced patient anxiety (Manlangit, Jabonete and Ridulme, 2022). Head nurses who implement effective clinical leadership styles are capable of creating an organizational culture that encourages continuous learning, critical reflection, and the development of cultural awareness

among nursing staff (Kamau *et al.*, 2023). According to Kiviniitty *et al.* (2023), through constructive feedback, head nurses facilitate the development of cross-cultural communication skills, help nurses understand patients' diverse values and beliefs, and support the adaptation of nursing care approaches based on each patient's cultural background. Kaihlanen *et al.* (2019) stated that cultural competence enables nurses to build therapeutic relationships with patients from various backgrounds, provide comprehensible information, and create inclusive care environments that respect each individual's cultural uniqueness, thereby reducing anxiety and improving patient satisfaction with nursing services.

According to the researchers' analysis, clinical leadership significantly influences nurses' cultural competence because clinical leaders serve as facilitators and role models in promoting cultural awareness in healthcare settings. Effective clinical leaders create supportive work environments that foster learning and the development of cultural competence through continuous training, mentoring, and constructive feedback. In the inpatient ward of Nurul Hasanah Hospital, strong clinical leadership can facilitate nurses in understanding patients' cultural diversity, including their values, beliefs, and traditional health practices, thereby enabling nurses to deliver more holistic and culturally appropriate care.

Good cultural competence among nurses, fostered by effective clinical leadership, directly contributes to reducing patient anxiety during hospitalization. Nurses who understand their patients' cultural backgrounds can communicate more effectively and provide psychological support tailored to the patients' cultural needs. This fosters trust and comfort, which ultimately helps to lower patients' anxiety levels. Moreover, clinical leaders who support the development of cultural competence ensure that nursing care practices are not solely focused on medical aspects but also consider the psychosocial and spiritual dimensions of the patient. This results in a more positive care experience and helps alleviate the psychological stress experienced by patients during hospitalization.

CONCLUSION

The findings of this study indicate that the majority of nurses were aged 25–35 years, female, held a Diploma in Nursing (D3), and had less than 2 years of work experience. Most patients had a relatively even age distribution, were female, had a senior high school education (SMA), and were predominantly of Alas ethnicity. In addition, nurses' clinical leadership was categorized as high, cultural competence as moderate, and patient anxiety levels as moderate. The results of the SEM-PLS analysis showed that clinical leadership had a positive effect on cultural competence ($\beta = 0.687$, $p < 0.001$) and a negative effect on patient anxiety ($\beta = -0.214$, $p = 0.004$). Cultural competence negatively affected patient anxiety ($\beta = -0.478$, $p < 0.001$) and served as a mediator in the relationship between clinical leadership and patient anxiety, with an indirect effect of $\beta = -0.328$ ($p < 0.001$). These findings confirm a significant influence of clinical leadership on nurses' cultural competence in reducing patient anxiety in the inpatient ward of Nurul Hasanah Hospital Kutacane.

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