Cultural Nursing Competence Among Graduate Nurses From Selected University in Indonesia: Findings From The Nurses Cultural Competence Scale

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Abstract.

Cultural diversity in Indonesia poses significant challenges and opportunities in nursing practice. Nurses are required to provide culturally sensitive care to meet patients' diverse cultural values, beliefs, and practices. Cultural care competence is therefore essential as a foundation for effective and patient-centered nursing care. However, evidence related to cultural competence among graduate nurses in Indonesia remains limited. This study employed a quantitative, descriptive, and analytical design with a cross-sectional approach. A total of 292 nurses who graduated from a selected University in Indonesia participated in the study using purposive sampling. Data were collected between March and April 2024 using the Nurses' Cultural Competence Scale (NCCS), which consists of 41 items covering four dimensions: cultural awareness, cultural knowledge, cultural sensitivity, and cultural skills. The data were analyzed using univariate descriptive statistics. The findings showed that 51.4% of respondents had a high level of cultural competence. Most participants were female (80.1%), with a mean age of 23.89 years and a mean working experience of 23.21 months. High levels were observed across all NCCS dimensions, including cultural awareness (54.1%), cultural knowledge (56.2%), cultural sensitivity (51%), and cultural skills (54.5%). The dominance of high cultural competence suggests that nurses possess adequate readiness to deliver culturally sensitive nursing care. Demographic characteristics such as age, gender, educational background, and early clinical exposure may have contributed to the development of cultural competence among respondents. The study demonstrates that nurses who graduated from a selected university generally exhibit good cultural care competence, which is crucial for providing responsive and culturally appropriate nursing care.

Keywords: *Cultural competence and cultural nursing care nurses cultural competence scale.*

I. INTRODUCTION

Indonesia's extraordinary cultural heterogeneity, encompassing hundreds of ethnic groups, thousands of languages, and diverse religious practices, shapes how people understand health, illness, and care-seeking behaviors [1]. Nurses are expected to deliver culturally sensitive care that aligns with patients' values and practices to ensure safety, effectiveness, and satisfaction in clinical encounters [2,3]. Cultural care competence is therefore not a peripheral attribute, but a core capability required for patient-centered nursing practice in Indonesia's multiethnic health system [4,5].Frontline reports in Indonesia and internationally continue to reveal practical barriers when nurses and patients differ in language, beliefs, and cultural norms, barriers that can prevent assessment, informed consent, adherence, and trust, eventually harming clinical outcomes and patient experience [6]. The urgency is heightened by workforce dynamics, as graduate nurses are deployed across geographically and culturally diverse regions, where adaptation to local expectations is needed [7,8].Prior nursing research in Indonesia has predominantly focused on nursing students, educational interventions, or samples drawn from single hospital regions, which has limited the generality of findings to the national nursing [9,10].

In contrast, the present study advances the literature by examining practicing graduate nurses rather than students, thereby capturing cultural care competence as it is applied in actual clinical practice [11]. Furthermore, this study draws on a geographically dispersed sample of nurses who graduated from one private university and are currently employed across multiple regions of Indonesia, reflecting the authentic cross-cultural challenges nurses face when deployed to culturally diverse and unfamiliar settings [7,8]. In

addition, the use of the Nurses Cultural Competence Scale (NCCS) is a validated and multidimensional instrument, enables a comprehensive assessment across four key domains: cultural awareness, cultural knowledge, cultural sensitivity, and cultural skills. This approach provides a more detailed competence [4,12].Despite increasing attention to transcultural nursing, existing studies largely underrepresent practicing graduate nurses who are deployed nationwide, resulting in a limited understanding of cultural competence within real-world clinical environments [9,10]. From a measurement perspective, many studies in Indonesia employ non-standardized or partial tools, with relatively few utilizing validated instruments, such as the NCCS, to differentiate distinct competence domains [4,5]. Few studies describe the challenges faced by nurses who are placed in very different cultural settings, such as those moving from urban areas to remote or regions with different languages [7,8]. This study provides useful evidence to support improvements in nursing education, hospital orientation programs, and policies aimed at strengthening culturally responsive nursing care [2,3].

II. METHODS

This study employed a quantitative descriptive design, utilizing a cross-sectional approach. The design was chosen to describe the level of cultural care competence among nurses. The inclusion criteria of the study were nurses who graduated from a selected university in Tangerang and were actively working in various hospitals across different regions of Indonesia. A purposive sampling technique was used to recruit participants who met the inclusion criteria. A total of 292 nurses participated in this study.Data were collected using the Nurses Cultural Competence Scale (NCCS) originally developed by Perng and Watson. The NCCS consists of 41 items measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The instrument measures four dimensions of cultural competence: cultural awareness, cultural knowledge, cultural sensitivity, and cultural skills. Higher total scores indicate a higher level of cultural competence. This instrument has been adapted and translated into the Indonesian language.

The process of translating and adapting instruments was based on recommendations from the World Health Organization (WHO), with I-CVI results ranging from 0.6 to 1, and Cronbach's Alpha of 0.963 [13]. Data were collected between March and April 2024 using an online questionnaire distributed through Google Forms. The survey link was shared through alumni communication networks. Before completing the questionnaire, participants received information about the study and provided informed consent electronically. Data were analyzed using descriptive statistics using SPSS. Demographic characteristics and cultural competence levels were presented using frequencies, percentages, means, and ranges. Ethical approval for this study was obtained from the Faculty of Nursing Ethics Committee No 067/KEPFON/I/2024. Participation was voluntary, and confidentiality was maintained by anonymizing all responses. Participants had the right to withdraw from the study at any time without any consequences.

III. RESULT AND DISCUSSION

Result

Table 1 describes a total of 292 graduate nurses who participated. The mean age was 23.84 years (SD = 2.036; range 19 – 31), and the mean length of employment was 23.28 months (SD = 19.709; range 3-91).

Table 1. Distribution of Respondents' Age and Length of Work Characteristics (n=292)

Variabel	Mean	SD	Min-Max
Age (year)	23,84	2,036	19 - 31
Length of work (month)	23,28	19,709	3 - 91

Table 2. The gender was predominantly female (80.1%). Respondents originated from multiple regions; the majority came from Sumatra (32.2%), Java (19.9%), and Sulawesi (13.4%). Regarding current workplaces, most were employed in Java (57.9%), followed by Borneo (11.6%) and Sumatra (11%).

Table 2. Distribution of Respondent Characteristics (n=292)

Variabel	f	%
Sex		
Male	58	19,9
Female	234	80,1
Region of origin		
Sumatera	94	32,2
Java	58	19,9
Kalimantan	30	10,3
Sulawesi	39	13,4
Papua	16	5,5
NTT (East Nusa Tenggara)	32	11,0
Maluku	21	7,2
Bali	2	0,7
Work location		
Singapore	1	0,3
Germany	1	0,3
Sumatera	32	11
Java	169	57,9
Kalimantan	34	11,6
Sulawesi	19	6,5
Bali dan Nusa Tenggara	31	10,6
Papua	5	1,7

Table 3 describes cultural competence, showing moderate to high mean levels across all four dimensions, with skills and awareness numerically highest.

Table 3. Cultural Competency

Variable	Mean	SD	95%CI
Cultural Awareness	42,12	4,654	41,58-42,66
Cultural Knowledge	35,61	4,648	35,07-36,14
Cultural Sensitivity	29,6	4,153	29,12-30,08
Cultural Skills	52,7	7,361	51,85-53,55
Cultural Competency	160,03	16,837	158,09 - 161,97

This study aimed to develop cultural competence among graduate nurses across Indonesia. The average dimension scores on the Nurse Cultural Competence Scale (NCCS) - Awareness 42.12, Knowledge 35.61, Sensitivity 29.60, Skills 52.70, and total 160.03 indicate moderate to high overall competency, with notable strengths in Cultural Skills and Cultural Awareness. Based on the NCCS instrument, higher skills imply practical proficiency in culturally sensitive communication, assessment, care planning, and goal setting, while higher awareness reflects the ability to recognize how culture shapes health beliefs and behaviors in everyday care [4]. Conversely, slightly lower knowledge and sensitivity indicate actionable opportunities to deepen conceptual understanding and to foster empathetic and respectful responses, especially in complex clinical encounters where beliefs, language, and norms may differ between nurses and patients [2,5]. This profile is consistent with the reality of young people at the beginning of their careers (average age 23.84 years; average 23.28 months of experience), who often demonstrate strong adaptability and responsiveness to training, enabling them to quickly increase their situational awareness and practical skills in a multicultural environment [8,9].This profile is consistent with the reality of young people at the beginning of their careers (average age 23.84 years; average 23.28 months of experience), who often demonstrate strong adaptability and responsiveness to training, thereby accelerating the acquisition of situational awareness and practical skills in a multicultural environment [8,9]. At the same time, conceptual knowledge and sensitivity typically mature with repeated and deliberate exposure, and structured reflection over time can enhance these domains [5,14].There are two interesting findings that may contribute to cultural skills and cultural awareness.

First, the geographical distribution of placements, with the majority in Java (57.9%) and a significant portion in Sumatra, Borneo, Bali-Nusa Tenggara, Sulawesi, and Papua, exposes this group to a variety of languages, belief systems, and local norms. Regular contact with these differences fosters direct competencies, ranging from adapting communication styles and clinical rituals to negotiating care plans that are sensitive to beliefs, thereby strengthening the domain of skills [6]. Second, undergraduate and early professional experiences tend to emphasize the recognition of cultural influences (Cultural Awareness) and respectful interactions (Cultural Knowledge) and sensitivity receive less sustained attention after graduation [2,4].When compared with evidence from Indonesia, these findings are consistent with research indicating that education and exposure enhance competence, but competence is a multi-component construct; improvements may cluster in specific domains depending on the learning design and clinical environment [5,10]. For example, short-term training can increase awareness and specific skills but may have a smaller effect on sensitivity if reflective practice and guided coaching are limited [2,5].The relatively lower scores for Cultural Knowledge (35.61) and Cultural Sensitivity (29.60) should be interpreted as areas of opportunity rather than deficits. Knowledge encompasses understanding health/illness beliefs, social determinants, and specific cultural practices, as well as the ability to compare and interpret these across different groups [4]. Sensitivity involves empathy, acceptance, respect, and refraining from opposing practices that are consistent with one's beliefs when safe, especially in negotiating care that respects patient values without compromising evidence-based standards [4,14]. This domain typically requires repeated learning anchored in real cases, where nurses can practice complex conversations and receive feedback on skills such as listening, reframing, and shared decision-making [5,6].

Increasing knowledge can be done through structured modules that describe the relationship between beliefs and behaviors (e.g., fasting when sick, traditional medicine, interpretation of time/space/silence) and language-mediated meanings (e.g., how words, idioms, and nonverbal cues shape consent and compliance) are linked to real-life cases in Indonesia [2,6]. Enhancing sensitivity benefits from guided reflection, guided preparation in cross-cultural meetings, and simulations that allow nurses to practice respectful negotiation when patients' beliefs initially differ from clinical guidelines [5,14]. Most studies in Indonesia have been conducted on students, short-term educational effects, or samples from a single region, which can limit generalizations to national practices [9,10]. By focusing on practicing graduate nurses working throughout Indonesia and reporting average dimension scores with 95% confidence intervals, this study adds to the relevance of the practice. These findings demonstrate that moderate to high competence can be achieved among nurses early in their careers when placements require genuine cross-cultural exposure, but they also reveal specific domain priorities (Knowledge and Sensitivity) that can be addressed by education and services [5,11].The study's implications for education are to increase knowledge and sensitivity without compromising skills and awareness. The curriculum can incorporate transcultural content throughout all courses (e.g., medical surgery, community, mental health), not just as a stand-alone course [4,11]. Case-based seminars should feature scenarios that are sensitive to beliefs drawn from regions in Indonesia (e.g., consent rituals, traditional medicine, fasting/food taboos, mourning rituals), coupled with role-playing and simulations that require students to practice empathetic and non-confrontational dialogue while maintaining clinical standards [2,6].

Hospitals and clinical services. Orientation and continuing education must be tailored to the context of the placement location. Mentorship, pairing new nurses with mentors or experienced nurses, creates space for guided reflection and questioning after cross-cultural encounters, which is essential for building sensitivity [11,14]. Since many placements extend to other islands, effective training is highly recommended [7,9]. The strength of this study lies in the average report and confidence interval for each NCCS dimension, which enables a more stable interpretation than simply dividing into high- and low-categories. The adaptation of the NCCS into Indonesian, which was done using existing translation methods, shows excellent internal consistency, supporting its repeated use for program monitoring and evaluation [12,14].Several limitations of the study are that the cross-sectional design and reliance on self-reports cannot establish causal relationships and may be influenced by social desirability bias, especially when respondents tend to show sensitivity [11,14]. This group emerged from a single university pathway, and although its distribution is

geographically widespread and uneven, this should be considered when generalizing the study results to different backgrounds (9,10). Furthermore, although this analysis reports average dimension levels, it has not linked competencies to specific demographic or placement variables (e.g., years of experience, island/region, unit type), which, according to the literature, can shape competencies [5,8].

IV. CONCLUSION

This study provides a profile of cultural competence in practice among graduate nurses from selected universities working throughout Indonesia, using the validated and multidimensional Nurse Cultural Competence Scale (NCCS). This group demonstrated moderate to high competence overall. These patterns likely reflect the early stages of the respondents' careers, broad geographic exposure, and basic training that supports recognition and practical application in culturally diverse care settings. These findings support improvements in accuracy at both the educational and service levels, including the following strategies: embedding transcultural content across all courses, providing guided coaching to increase sensitivity, offering context-specific hospital orientation with local language and belief resources, and conducting periodic NCCS monitoring to track progress across various dimensions.

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