

Ethno-nursing skills in multicultural nursing practice: A systematic literature review



Rr. Sri Endang Pujiastuti^a   | Taadi^a | Emy Rianti^b | Sudarmin^c | Hanifatul Umami^c |
Aurma Hanun Kusuma^d

^aPoltekkes Kemenkes Semarang, Semarang, Indonesia.

^bPoltekkes Kemenkes Jakarta I, Jakarta, Indonesia.

^cUniversitas Negeri Semarang, Semarang, Indonesia.

^dTambakaji Community Health Center, Semarang, Indonesia.

Abstract Cultural diversity in a global society demands that nurses possess strong cultural competence in nursing practice. Cultural competence in nursing is referred to as Ethno-Nursing, a field of study in Ethnoscience. Ethnonursing research is highly relevant to the Vision and Mission of the Nursing Department of the Semarang Ministry of Health Polytechnic, which is oriented towards health services that uphold local wisdom. This research aims to systematically review global trends, approaches, and contributions of ethno-nursing in nursing practice and culture-based nursing education. The method used was a systematic literature review of 11 articles from various databases selected using specific inclusion and exclusion criteria. Based on data analysis from articles published between 2015 and 2025, it was concluded that the field of transcultural skills in nursing practice and culture-based nursing education experienced an increasing trend in publications. The United States contributed the largest number of publications, followed by Asian countries such as the Philippines, South Korea, and China. The learning and educational approaches used included culture-based clinical simulation, reflective learning, case-based training, and the integration of Leininger's Transcultural Nursing theory and the Campinha-Bacote model. This diversity approach effectively develops nursing students' transcultural skills, including cultural awareness, cultural knowledge, cultural sensitivity, cross-cultural communication, and the role of culture and nursing practice in society. This study concludes that strengthening transcultural skills is an essential part of global nursing education. Culturally based learning innovations have proven strategic in addressing the challenges of increasingly multicultural healthcare. Ethno-nursing, as a culture-based nursing approach, is crucial for development in today's global era.

Keywords: ethnoscience, PRISMA, culture-based nursing, nursing education

1. Introduction

The nursing field faces new challenges with increasing global mobility and the cultural diversity of patients in various healthcare facilities (Lamaluta & Zulkifli, 2025). Nurses are not only required to master technical skills, such as measuring vital signs, administering medication, or caring for wounds but also to understand the values, beliefs, and practices of their culture (Novieastari et al., 2018). Mismatches between nursing practices and patient culture can lead to tension and misunderstandings in patients (Shahzad et al., 2021). According to Degrie et al. (2017), nursing care is disrupted when there is a mismatch between the patient's culture and the communication style of healthcare providers, which can lead to mistrust and even rejection of nursing care. Degrie et al. (2017) also explained that nurses often experience difficulties when dealing with patients of different ethnicities due to differences in pain expression, which can easily lead them to misjudge the severity and need for pain management. Language barriers also pose a significant barrier to nursing interactions, leading to confusion that reduces the effectiveness of nursing care (Gerchow et al., 2021). This issue impacts not only the patient–nurse relationship but also patient clinical outcomes. Therefore, a culture-based nursing approach is urgently needed to bridge this gap. One relevant approach is ethno-nursing or transcultural nursing (Setyawati & Nursanti, 2024).

Ethnursing, also known as transcultural nursing, is an approach developed by Madeleine Leininger that emphasizes the importance of providing nursing care in accordance with patients' cultural values, beliefs, and practices (Setyawati & Nursanti, 2024). This model includes tactics such as preservation, accommodation, and repatterning, allowing nurses to respect cultural customs without compromising basic medical principles (Lamaluta & Zulkifli, 2025). This concept requires nurses to possess competencies such as cultural awareness, knowledge, skills, attitudes, empathy, and self-efficacy (Afrizal et al., 2023). However, implementing this approach in the field is not always easy.

Many nurses have not received formal training in cross-cultural nursing (Purwana et al., 2023). Nursing students also report communication barriers, psychological unpreparedness, and limited cross-cultural experience when they are placed in hospitals with multiethnic patient populations (Messoudi et al., 2023). Although some educational institutions have begun



developing ethno-nursing curricula, evaluations of their success remain limited. Basic skills, such as bathing a patient, providing oral care, or transferring a patient, are inextricably linked to cultural aspects, including privacy, gender, and local etiquette. Therefore, basic and cultural skills are inseparable in the context of multicultural nursing practices (Mojini et al., 2024). A transcultural nursing approach is essential to ensure that nursing actions are not only procedurally appropriate but also culturally acceptable (Larsen et al., 2021).

Cultural competency training can improve communication skills, empathy, and cross-cultural understanding in nurses and nursing students (Majda et al., 2021). Ton et al. (2024) reported that a simulation-based cultural education program significantly improved the cultural competence and self-efficacy of nursing students. Various theoretical models, such as the Purnell Model for Cultural Competence and Campinha-Bacote's Process of Cultural Competence, have been developed to support ethno-nursing training and assessment. These models emphasize the importance of elements such as cultural awareness, cultural knowledge, skills, encounters, and desire as the basis for developing nurses' cultural competence (Purnell, 2002; Campinha-Bacote, 2002). However, in practice, these models have not been widely applied in basic nursing skills training. Antón-Solanas et al. (2021) explain that cultural competence and specific cultural models are not integrated and grounded in nursing learning modules and curricula. Tosun et al. (2021) stated that cultural training is still considered an additional or optional (nonpriority) component of the curriculum, resulting in the unsystematic development of ethno-nursing skills. However, basic skills such as patient-priority communication, oral education, or spiritual care require cultural understanding to be effective.

As the demand for inclusive and culturally sensitive nursing services increases, the study of ethnursing skills and competencies becomes increasingly important. Systematic reviews are needed to identify interventions, training methods, barriers, and outcomes of ethno-nursing implementation across diverse nursing populations. Therefore, a systematic review is essential for collecting, evaluating, and synthesizing research findings related to ethnursing competencies and skills applied in multicultural nursing practice. The results of this review are expected to provide a comprehensive overview of the most relevant and effective dimensions of ethno-nursing competencies in supporting quality nursing practice. Furthermore, the results of this systematic literature review will contribute to the development of nursing curricula and cultural competency measurement tools and strengthen the scientific foundation for policymakers and educational institutions in preparing professional and culturally sensitive nursing staff. This study aims to synthesize the findings of studies analysing ethnursing competencies and skills in multicultural nursing practices.

2. Methods

2.1. Procedure

The research examines ethno-nursing study materials as part of the field of ethnoscience. The multicultural-based ethnursing approach in this research emphasizes that nursing care must be developed by taking into account the cultural diversity of patients and their communities, especially the culture of the Javanese Indonesian Community. The ethnursing approach has developed in various countries in America, China, and various European countries. Conceptually, this approach refers to the idea that values, beliefs, traditional practices, and local wisdom influence perceptions and ways of caring for health, so that nurses and health workers need to have cultural competence and cultural sensitivity to provide appropriate services. This research also refers to studies from previous researchers, namely Naviati, et al., (2024) and McFarland et al., (2012). Nursing practice in this research means nursing practice that considers the condition of the patient and family, interdisciplinary collaboration, family education and environmental adjustment, as part of cultural care behaviors to prevent neutropenic fever in children with leukemia after chemotherapy (South & Phillips, 2004).

This study employs a descriptive narrative research design, utilizing the systematic literature review (SLR) method and incorporating literature study techniques on the basis of published secondary data. The evaluation method used was the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) to assess the quality of the articles to be reviewed (Hartini et al., 2025). The primary data sources in this study are Google Scholar, Scopus, ScienceDirect, and PubMed, with search queries utilizing Boolean operators. The search queries in this study are ("ethnursing" OR "transcultural nursing" OR "cultural nursing") AND ("nursing skills" OR "basic nursing skills" OR "nursing competence") AND ("multicultural care" OR "culturally competent care") AND ("nurses" OR "nursing students"). Data from the database search were identified by removing duplicate data, and the remaining data were sorted alphabetically by title. The screening and eligibility process was conducted through a feasibility selection process, ensuring that the analysed data were relevant, high-quality, and aligned with the research focus. The inclusion criteria applied to eliminate data are presented in Table 1.

The PRISMA flowchart provides a comprehensive overview of the article selection process. This study demonstrates how 566 initial documents underwent rigorous screening, ultimately selecting 11 relevant and eligible documents for analysis in a systematic literature review on research on ethnursing skills in multicultural nursing practice. The PRISMA flowchart visualization ensures transparency in the selection process and enhances the reliability of the study results, as systematically illustrated in Figure 1.

Table 1 Inclusion and exclusion criteria with the PICOS format.

Criteria	Inclusion	Exclusion
Population	Nurses, nursing students, or healthcare professionals engaged in multicultural nursing practice	Studies in nonnursing professions (doctors, physiotherapists, etc.) without a focus on nurses or nursing students.
Intervention	Cultural competence improvement programs (e.g., cultural awareness, cultural knowledge, cultural skills, empathy, and self-efficacy).	Interventions unrelated to training or cultural approaches, and research on technical skills (basic nursing skills) without cultural competence aspects
Comparision	Comparison between groups receiving cultural training/interventions and those not receiving.	Studies irrelevant to the comparison of ethno-nursing approaches versus other methods
Outcomes	Improvement of ethno-nursing skills, including cultural awareness, knowledge, skills, attitudes, empathy, and self-efficacy.	Articles that do not measure or discuss cultural competence, ethno-nursing skills, or culturally related care outcomes.
Study Design	Quantitative studies (experimental, quasiexperimental, cross-sectional). - Qualitative studies exploring nurses' experiences in multicultural practice. - Mixed methods Articles published within the last 10 years (2015–2025), in English, and available in full text	Reviews, editorials, opinion pieces, short reports, or nonresearch articles. Articles published before 2015 and not available in full text. Studies in languages other than English.

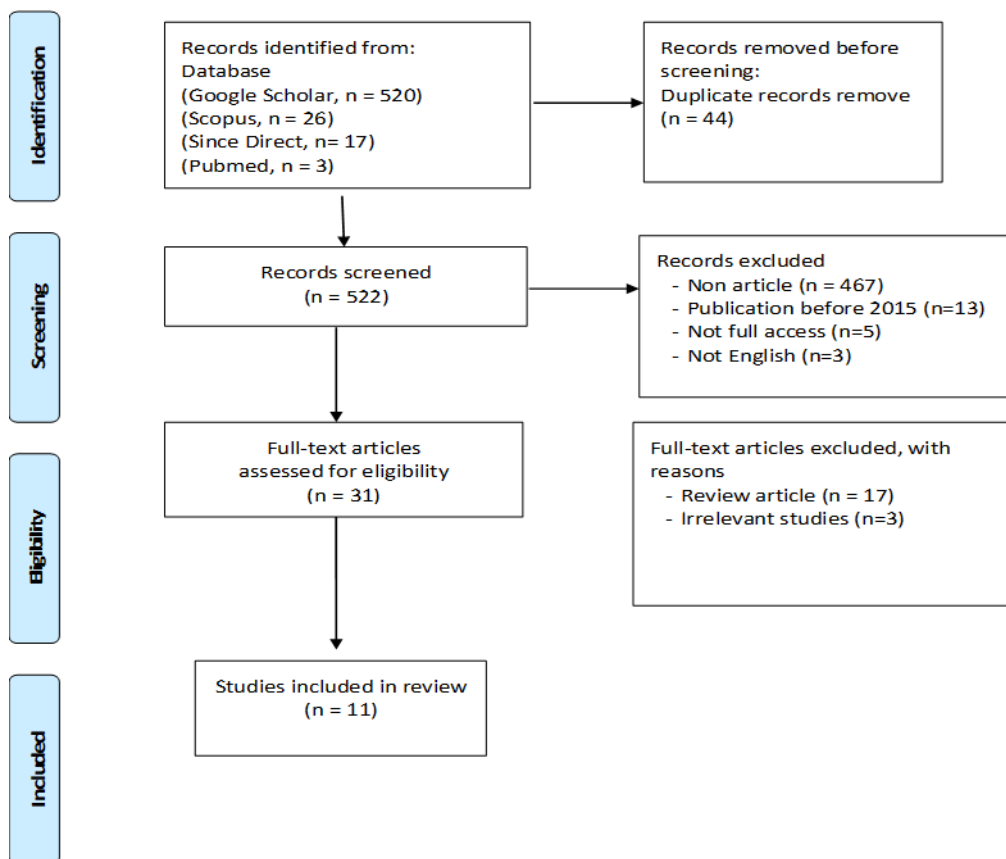


Figure 1 PRISMA diagram.

3. Results and Discussion

This study obtained 566 initial data in the form of articles from the Google Scholar, Scopus, ScienceDirect, and PubMed databases. In the next stage, 44 duplicate data points were removed, leaving 522 articles. In the screening stage, 488 articles were removed because they did not meet the inclusion criteria: they were nonresearch articles, published prior to 2015, lacked full access, or were in a nonEnglish language. This left 31 articles for the eligibility stage. At this stage, 20 articles that did not fully meet the inclusion criteria were excluded because they were less relevant to the topic and were not research articles. After a series of research stages, 11 articles remained for systematic review.



3.1. Distribution of publication by year

The research publication trends analysed between 2015 and 2025 show fluctuating dynamics. On the basis of the search and selection of articles from the database, the number of publications is not evenly distributed each year. Publications increased in 2018, indicating an increase in interest in ethno-nursing, transcultural nursing, and multicultural nursing during that period. However, the presence of articles from 2024 and 2025 indicates that this topic remains relevant and has the potential to continue developing for future research. A visualization of publication trends from 2015 to 2025 is presented in Figure 2.

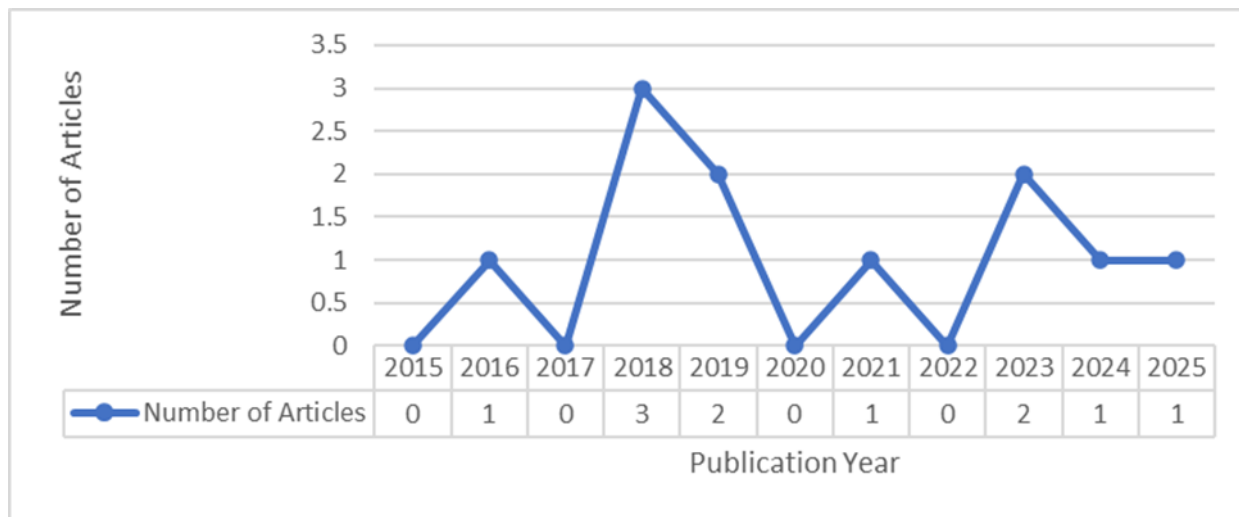


Figure 2 Distribution of publications in from 2015-2025 (Data retrieved from the 11 included studies).

A growing trend in the publication of articles on ethnursing, transcultural nursing, and multicultural nursing occurred in 2018. This surge was likely influenced by growing global awareness of the importance of culture-based nursing as patient populations become more diverse (Caglar & Bilgili, 2020). International organizations, such as the World Health Organization (WHO), the International Council of Nurses (ICN), and the American Association of Colleges of Nursing (AACN), have begun emphasizing the integration of cultural competency in nursing education (Anderson et al., 2023). Educational institutions have also begun adopting frameworks such as Leininger's Transcultural Nursing Theory and the Campinha-Bacote Model, which have spurred new research on the effectiveness of culture-based clinical simulations (Khoiriyah & Nursanti, 2024; Nearagh et al., 2025). Byrne (2020) and Fioravanti et al. (2018) demonstrated that culture-based simulations can significantly improve nursing students' cultural awareness and skills, thereby encouraging more studies during this period.

The research results revealed that this trend decreased in 2020 and 2022. The decline in 2020 was closely related to the COVID-19 pandemic, which shifted research priorities to emergency topics such as patient safety, infection control, and intensive care (Im et al., 2021). Restrictions on face-to-face activities also made clinical simulations and cultural practice learning difficult, thus hampering research continuity (Kaveh et al., 2022). Adapting the curriculum online also presented challenges, particularly because culture-based simulations require direct interaction and realistic environments (Molato & Sehularo, 2022). In 2022, the postpandemic recovery phase was still underway. Many institutions are still making structural and operational adjustments and facing publication backlogs due to editorial delays and limited research funding (Maggio et al., 2024).

A review of the literature indicates that there was a decline in the productivity of scholarly publications, as health and safety concerns became major constraints during the COVID-19 pandemic. In the Indonesian context, a similar pattern was observed: during the pandemic period, the number of academic publications declined, in part because research funding for nursing education and related fields in Indonesia was reduced and reallocated to address the urgent impacts of COVID (Else, H, 2021). The article search revealed a decline in the number of reputable articles, due to health and safety constraints. In the Indonesian context, the same thing was found, because during the Covid-19 pandemic in Indonesia, the number of publications decreased, because at that time, many budget funds for the field of nursing education in Indonesia decreased, and were diverted to handling the impact of Covid-19 in Indonesia.

This decline in publications reflected the direct impact of the global crisis on research activities, particularly those focused on culture-based nursing education. The trend began to stabilize between 2023 and 2025, suggesting that attention to cultural competency in nursing was driven by an evaluation of healthcare disparities during the pandemic. Technological advances, such as virtual simulation and augmented reality, are beginning to be utilized to simulate cross-cultural scenarios without the constraints of physical space, making them an ideal solution postpandemic (Chae et al., 2023). This opens up opportunities for institutions to reactivate research and publications while adopting innovative learning approaches.



3.2. Distribution of publication by source and country

Articles on ethnonursing, transcultural nursing, and multicultural nursing were obtained from various scientific journals. Each article had a diverse focus but remained within the scope of developing cultural competency in nursing practice. The distribution of these articles demonstrates that the topic of culture-based nursing has received widespread attention in various academic forums. Furthermore, the diversity of journals also reflects the need across institutions to integrate cultural approaches into nursing education and practice. The distribution of publications by source and country is presented in Table 2.

Table 2 Journal of article publication.

Journal Name	Country	Number of Publications
International Journal of Nursing Sciences	China	1
Humanities & Social Sciences Reviews (HSSR)	United Arab Emirates	1
Journal of Professional Nursing	United States	1
BMC Nursing	United Kingdom	2
Nurse Education in Practice	United Kingdom	1
The Malaysian Journal of Nursing	Malaysia	1
Applied Nursing Research	United States	1
Journal of Transcultural Nursing	United States	1
Frontiers in Public Health	Switzerland	1
PLOS One	United States	1

The distribution of articles related to ethnonursing, transcultural nursing, and multicultural nursing is wide ranging across various journals. These articles are published in journals from various countries, indicating that the issue of culture-based nursing is a global concern across regions. The country with the greatest contribution to publications is the United States, with a total of four articles published in reputable journals, such as the Journal of Professional Nursing, Applied Nursing Research, Journal of Transcultural Nursing, and PLOS One. This dominance by the United States suggests that the study of cultural competency in nursing practice is a crucial aspect of healthcare education and policy in that country (Alexander et al., 2020). In addition to the United States, the United Kingdom also contributed two articles through the journals BMC Nursing and Nurse Education in Practice, both of which are indexed by Scopus and contain numerous publications on clinical practice and nursing education. Contributions from journals from Asia, such as the International Journal of Nursing Sciences from China and the Malaysian Journal of Nursing from Malaysia, are also quite prominent. This contribution demonstrates that Asia is increasingly addressing the issue of cultural diversity in nursing by providing holistic and patient-centered care from diverse cultural backgrounds (Songwathana et al., 2021).

Although contributing only one article, Humanities & Social Sciences Reviews (HSSR) from the United Arab Emirates (UAE) reflect the Middle East's involvement in the transcultural nursing discourse. Frontiers in public health from Switzerland and PLOS from the United States reflect the openness of multidisciplinary journals to address cross-cultural topics in nursing and public health. The relatively even distribution of articles from various countries and journals demonstrates that multicultural nursing issues are not limited to one region or health system. The articles in these journals reflect the widespread academic recognition of this issue as part of global efforts to improve the quality of culture-based healthcare services. This distribution also demonstrates that cultural challenges in nursing practice have been addressed through learning innovations, such as culture-based clinical simulations and models that strengthen transcultural competency (Qin & Chaimongkol, 2021). The geographically diverse distribution of articles in journals indicates that the development of culturally sensitive nursing care is being increasingly undertaken, supported by scientific evidence from reputable academic forums.

A literature review revealed that although cross-cultural nursing theory emphasizes the importance of nursing care that respects patients' cultural values, beliefs, and practices, significant gaps exist when modern services are implemented without cultural sensitivity. A quantitative study in Indonesia found that 53.2% of nurses and 55.9% of nursing students fell into the low cultural competency category, meaning many nurses and nursing students lack adequate knowledge, attitudes, and skills to understand and respect patients' cultural diversity (Almutairi, 2015; Birhanu et al., 2023). This situation suggests that despite the availability of modern medical services, cultural aspects are often overlooked in daily practice. In another context, a study in Sumenep Regency of Madurese families with toddlers with nutritional problems showed that although a culture-based nursing care model had been proposed, in its implementation, approximately 40% of nurses reported that they "rarely or never" considered cultural values, lifestyles, family philosophies, or traditional customs when assessing and providing care (Hidayat et al., 2010). This suggests that theoretical ideals are not always translated into practice, resulting in modern care becoming a "one-size-fits-all" clinical practice without adaptation to local cultural contexts, resulting in a misalignment between patients' culturally based expectations and the services they receive.

Furthermore, a systematic review of cross-cultural nursing practice in many countries indicates that providers (nurses and nursing students) face various challenges in implementing "transcultural care": these challenges include cultural conflict,

differing interpretations of values related to illness and healing, communication barriers and differences in expressing pain or suffering, and organizational and institutional barriers to supporting culturally sensitive care (Shahzad et al., 2021; Chang, 2018). This suggests that this gap is not unique to Indonesia but is a global phenomenon in modern healthcare systems. The consequences of this gap, the difference between the ideal of “culture-based care” and the dominant “modern care,” can have serious consequences: patients from minority or traditional cultural groups may feel disrespected, misunderstood, or uncomfortable with the care provided; trust in healthcare professionals may be diminished; access to culturally relevant care may be hindered; and the quality of care can be reduced due to the neglect of cultural aspects and cultural needs. Therefore, efforts are needed to systematically integrate cultural competence into nursing education and clinical practice, as well as ongoing evaluation of the implementation of "cultural care" so that modern services remain responsive to cultural diversity.

3.3. Ethnonursing skills in multicultural nursing practice

This systematic article provides an overview of how the ethno-nursing approach is applied in various cultural contexts and healthcare systems. Furthermore, the variety of methodologies and subject characteristics indicates the focus and direction of research in this field. The results of the analysis for each article are presented in Table 3.

Table 3 Analysis of research findings.

Title	Author	Method	Findings
A Preliminary Multicultural Nursing Competence Instrument for Assessing Undergraduate Student Nurses	Xu et al. (2016)	- Qualitative: Literature review, semistructured interviews - Quantitative: Questionnaire - Subjects: 322 final-year nursing students undergoing clinical practice at five hospitals in Hunan, China	The developed instrument is valid and reliable for measuring students' multicultural nursing competencies: cultural cognition, cultural attitude, cultural knowledge, cultural skills, and cultural encounters. These five dimensions equip students to address the cultural diversity of patients in clinical practice and support the integration of education into the nursing curriculum, ensuring that graduates are prepared to provide culturally sensitive nursing care in a multicultural society.
Cultural Competence Level, Its Importance, and Educational Needs for Cultural Competence Among Nurses Caring for Foreigners in Korea	Kim et al. (2019)	- Descriptive quantitative: closed-ended questionnaire - Subjects: 159 nurses caring for foreign patients at various healthcare institutions in South Korea.	Cultural Competence Level Nurses' cultural competence level (awareness, knowledge, skills, and encounters) is moderate. Skills and in-depth understanding of culture are not yet fully developed. Perceived Importance of Cultural Competence Nurses perceive the importance of cultural competency in nursing practice. They recognize that cultural understanding is crucial for improving the quality of care. Educational Needs for Cultural Competence The most prominent educational needs are in intercultural communication and understanding patients' cultural values. Nurses require practical and contextual training to establish effective therapeutic relationships with patients from diverse cultural backgrounds.
Cultural Competence of Baccalaureate Nurse Faculty: Relationship to Cultural Experiences	Farber (2019)	Correlational descriptive quantitative: Cultural Awareness and Sensitivity Tool (CAS) and Cultural Experience Survey (CES) instruments Subjects: 82 nursing lecturers from various nursing institutions in the USA	The cultural competence of nursing lecturers is considered high, particularly in terms of cultural awareness and sensitivity. Lecturers demonstrate awareness and sensitivity to cultural diversity in nursing education. Lecturers with more cultural experience demonstrate higher levels of cultural



<p>Developing the Better and Effective Nursing Education for Improving Transcultural Nursing Skills, Cultural Competence, and Cultural Sensitivity Assessment Tool (BENEFITS CCCSAT)</p>	<p>Yava et al. (2023)</p>	<p>Research & Development (R&D): Developing a measurement tool (BENEFITS-CCCSAT) Subjects: 720 undergraduate nursing students from various nursing educational institutions in Türkiye</p>	<p>competence because exposure to cultural experiences, such as studying or working in a multicultural environment, can significantly enhance cross-cultural understanding and skills. The BENEFITS-CCCSAT instrument was successfully developed with 40 items and five main indicators: transcultural nursing skills, cultural competence, cultural sensitivity, cultural awareness, and attitude and behavior. BENEFITS-CCCSAT can help educational institutions improve students' cross-cultural skills and prepare them to deal with diverse patients in clinical practice.</p>
<p>Embracing Diversity and Transcultural Society Through Community Health Practicum Among College Nursing Students</p>	<p>Chang et al. (2018)</p>	<p>Quasiexperimental: The experimental group participated in workshops and community practice, while the control group did not participate in workshops to assess the effectiveness of the intervention and the factors influencing transcultural nursing competence. - Subjects: 46 students in the experimental group and 49 students in the control group at a junior college in southern Taiwan.</p>	<p>The experimental group showed significant improvement in five aspects of transcultural competence. In comparison, the control group only improved in three aspects: transcultural knowledge, transcultural awareness, and nursing skills. Other factors such as community experience, cultural beliefs, and English language proficiency influence students' levels of cultural competence. Direct interaction with multicultural communities during practicum helps students understand the importance of culturally sensitive nursing care.</p>
<p>Empowerment of Foreign Nurses to Develop Self-efficacy in Culturally Competent Care Delivery</p>	<p>Presley and Zwane (2023)</p>	<p>- Mixed methods, sequential exploration: Transcultural Self-Efficacy Tool (TSET) Subjects: 92 expatriate nurses in the United Arab Emirates from various countries, including India, the Philippines, Jordan, South Africa, and others.</p>	<p>Significant improvements were seen in all three domains of the Transcultural Self-Efficacy Tool (TSET): cognitive, practical, and affective. Interactive lectures, group discussions, and scenario-based problem-solving effectively increased the confidence of foreign nurses in providing culturally sensitive nursing care. Qualitative data supported the quantitative findings, indicating that participants felt more confident, aware of the importance of cross-cultural communication, and understood their patients' values and beliefs.</p>
<p>Evaluating the effectiveness of a new curriculum for transcultural nursing education: a mixed-method study</p>	<p>Tosun et al. (2024)</p>	<p>- Quantitative: Transcultural Self-Efficacy Tool (TSET) Qualitative: In-depth interviews and student reflections Subjects: 82 undergraduate nursing students at a South Korean university</p>	<p>A significant increase in students' self-efficacy scores across the three TSET domains—cognitive, practical, and affective—was observed after participating in a transcultural curriculum that integrated active learning, case discussions, and cross-cultural practice, thereby enhancing their readiness to provide multicultural nursing care. Qualitative results corroborated the quantitative data, indicating that students felt more confident, understood the importance of cross-cultural communication, and were more aware of</p>



<p>Exploring Cultural Competence of Nurses and Associated Barriers in Ethiopian Tertiary Hospitals: A Qualitative Study</p>	<p>Geleta et al. (2021)</p>	<p>- Qualitative descriptive phenomenological design: semistructured in-depth interviews Subjects: 18 nurses working in two tertiary hospitals in Ethiopia</p>	<p>the differences in patient values and customs. Nurses have a limited understanding of the concept of cultural competence, although they demonstrate an awareness of the importance of adapting nursing approaches to patients' cultural backgrounds. However, their practices remain general and lack a deep cultural understanding. Several key barriers were identified, including language barriers, differences in values and beliefs, a lack of formal cultural training, and high workloads, which hinder effective communication. Nurses emphasized the importance of organizational support and hospital policies in promoting culturally sensitive nursing practices.</p>
<p>Level of Cultural Self-Efficacy of Colombian Nursing Professionals and Related Factors.</p>	<p>Herrero et al. (2018)</p>	<p>Correlational descriptive quantitative: Cultural Self-Efficacy Scale (CSES) questionnaire Subjects: 174 active professional nurses in Colombia across various healthcare facilities</p>	<p>Most nurses demonstrated moderate to high levels of cultural self-efficacy, particularly in cultural comfort and cultural skills. The lowest scores were in cultural knowledge, indicating that their theoretical understanding of culture still needs improvement, even though their interaction skills are already quite good. Factors influencing cultural self-efficacy include work experience, formal cultural training, and frequency of contact with patients from diverse backgrounds. Nurses who receive training and frequently care for multicultural patients tend to have higher self-efficacy.</p>
<p>Psychometric Evaluation of the Chinese Version of the BENEFITS-CCCSAT based on CTT and IRT: A Cross-Sectional Design Translation and Validation Study</p>	<p>Li et al. (2025)</p>	<p>Cross-sectional method: Chinese version of the BENEFITS-CCCSAT instrument Subjects: 502 nursing students from three universities in China</p>	<p>Validity and reliability test results indicate that the Chinese version of the BENEFITS-CCCSAT has excellent psychometric properties. Exploratory and confirmatory factor tests support a five-dimensional structure: transcultural nursing skills, cultural competence, cultural sensitivity, cultural awareness, and attitude and behavior. IRT (Rasch model) analysis showed that most items fell within the ideal fit range, with varying and even item difficulty levels. These results suggest that this instrument can be effectively used to assess the varying levels of cultural competence among nursing students in the Chinese educational context.</p>
<p>The Association Between Cross-Cultural Competence and Well-Being Among Registered Native and Foreign-Born Nurses in Finland</p>	<p>Wesołowska et al. (2018)</p>	<p>Cross-sectional study: Cross-Cultural Competence in the Health Care Profession (CCCHP) instrument Subjects: 744 Finnish nurses, 212 foreign nurses</p>	<p>Cross-cultural empathy plays a crucial role in the well-being of nurses. Empathy was significantly negatively associated with time pressure, psychological distress, and sleep problems, suggesting that higher empathy is associated with better nurse well-being. Other dimensions, such as skills, positive attitudes, and motivation, did not show significant effects after multivariate analysis.</p>



International nurses had higher empathy, skills, and motivation, but lower positive attitudes, than local nurses. However, there was no difference in the effect of cross-cultural competence on well-being between the two groups, and empathy-based training is recommended for all nurses to improve the quality of care in multicultural environments.

According to the analysis results, most studies highlight the measurement and development of cultural competence in nursing via various instruments, such as the BENEFITS-CCCSAT used by Yava et al. (2023) and Li et al. (2025). Several studies have utilized the Cultural Awareness and Sensitivity Tool (CAS) and the Cultural Experience Survey (CES) to assess nurses' levels of cultural awareness, sensitivity, and experience. The Transcultural Self-Efficacy Tool (TSET) is also used to evaluate nurses' confidence in cognitive, practical, and affective domains relevant to cross-cultural practice. The Cultural Self-Efficacy Scale (CSES) is used to measure nurses' confidence in interacting with patients from different cultural backgrounds, with dimensions of comfort, skills, and knowledge.

Xu et al. (2016) developed the Multicultural Nursing Competence Scale instrument, which emphasizes five important dimensions: cultural cognition, cultural attitudes, cultural knowledge, cultural skills, and cultural encounters. The results of the study indicate that the cultural knowledge dimension is often the weakest aspect compared with skills and attitudes. Nurses with high levels of empathy are better equipped to overcome language barriers and provide culturally appropriate nursing care to patients. These instruments have been demonstrated to be effective in identifying nurses' strengths and weaknesses in cultural competency. Wesolowska et al. (2018) highlighted that empathy is a crucial indicator influencing nurses' well-being and contributing to psychological well-being.

Nursing education also emerged as a major theme discussed in these articles. Studies have used the TSET and CSES to assess improvements in students' self-efficacy after simulation-based training, problem-based learning, or community practice. Tosun et al. (2024) reported that simulation-based training improved scores on the cognitive, practical, and affective domains of the TSET. Presley and Zwane (2023) reported that integrating cross-cultural content into the curriculum increased cultural awareness and sensitivity. Chang et al. (2018) demonstrated that community-based learning led to improvements in the perceived meaning of cultural care and communication skills.

The study results showed that CASs and CESs were effective in monitoring students' cultural experiences related to improved skills and attitudes. Kim et al. (2019) also confirmed that students' multicultural experiences abroad increased their cultural self-efficacy scores on the basis of the CSES. In general, active learning and real-life experience-based methods are considered the most effective methods for improving transcultural nursing competency.

These findings confirm that practice-based education is a key pillar in strengthening cultural competence. Geleta et al. (2021) and South et al., (2004) emphasized that cultural barriers, such as language and spiritual values, need to be addressed through intensive formal training. Using a combination of CAS, CES, and TSET instruments helped identify the need for experiential training. Simulation-based education, field practice, and cultural reflection are effective in enhancing cultural competence. These findings emphasize the importance of integrating transcultural nursing into nursing policies and curricula. In the context of the nursing program under the Ministry of Health in Semarang, revisions were aimed at systematically integrating transcultural nursing material into the curriculum and developing learning modules that effectively support cultural competency. Thus, transcultural nursing topics were included as an official part of the curriculum, not merely as additional content, with clear learning objectives related to cultural sensitivity, intercultural communication, and cultural competency in nursing practice (e.g., through theory and cultural assessment). Various learning methods, such as simulations, clinical practice in multicultural communities, and post-interaction cultural reflection, were chosen because they have been empirically proven to increase cultural awareness and cultural competency in nursing students. Therefore, the nursing program at the Ministry of Health in Semarang has the potential to produce nurses who are not only clinically competent but also sensitive to cultural difference able to communicate cross-culturally, respect patients' beliefs and values, and provide holistic, inclusive, and responsive nursing care to sociocultural diversity.

3.4. Analysis of keywords and clusters in culture-based nursing research

Keyword analysis was conducted via VOSviewer to examine the relationships and clusters of culture-based nursing research topics, particularly those related to ethnursing and transcultural nursing. The visualization results show the most frequently occurring keywords and clusters of interconnected themes. This analysis helps us understand the primary focus of the research and potential understudied gaps. The map of keywords and clusters is presented in Figure 3.

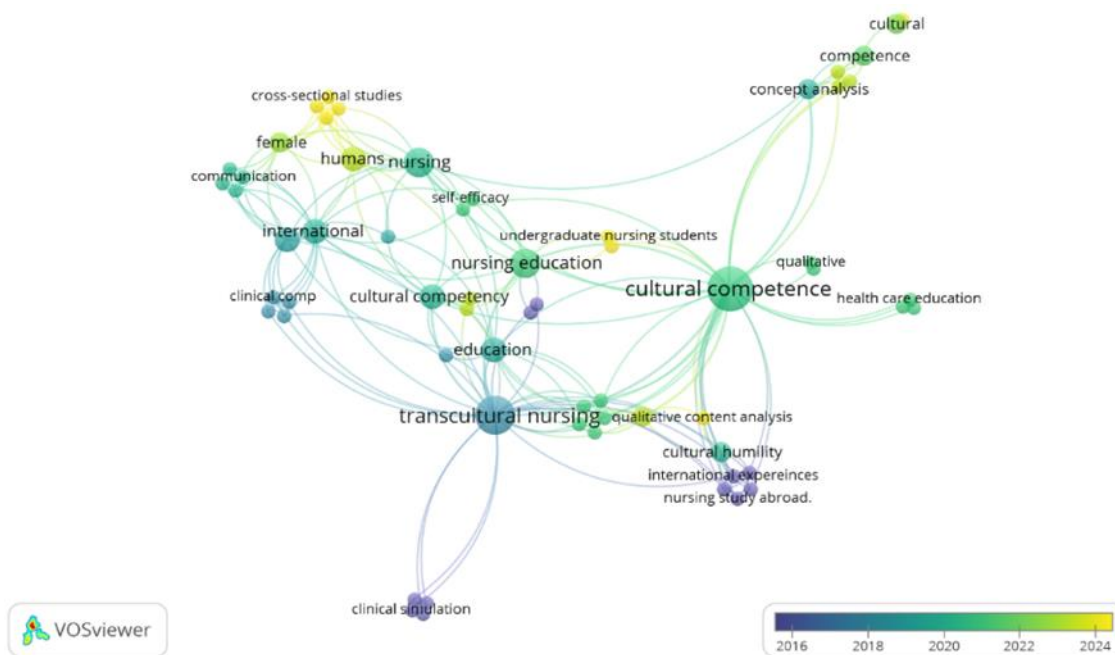


Figure 3 Map of keywords and clusters (Data retrieved from the 11 included studies with the help of VOSviewer).

Keyword visualization via VOSviewer reveals that "cultural competence" is the keyword with the largest node size, indicating the most dominant level of frequency and connectivity in culture-based nursing research. This keyword is interconnected with other important topics, such as transcultural nursing, nursing education, cultural competency, and cultural humility, which are grouped in a large cluster. The dominance of this keyword reflects the current research focus, which emphasizes the importance of nurses' ability to understand patients' cultural values and practices. Furthermore, the keywords "education" and "undergraduate nursing students" indicate that most studies also discuss the integration of cultural competence in nursing education curricula.

The relationships between these keywords are visible through connecting lines, indicating topical connections and collaborations in the literature. The use of keywords such as "communication," "self-efficacy," and "clinical simulation" with transcultural nursing highlights the importance of communication skills and simulation in enhancing cultural competence. This visual map illustrates how key topics support one another in the development of multicultural nursing. The primary research theme focuses on cultural competence and its application in nursing practice.

The keyword "transcultural nursing" also plays a significant role in the main cluster and is linked to terms such as "international," "nursing study abroad," and "cultural humility." This suggests that culture-based nursing research extends beyond theory to encompass cross-border experiences and global interactions. Topics such as "international experiences" highlight a focus on nurses' ability to navigate cultural differences during practice in various countries. The presence of the keyword "self-efficacy" suggests that nurses' confidence in providing culture-based care is a frequently analysed aspect.

Clinical simulation, which appears in the lower cluster, also highlights practice-based learning methods for enhancing nursing students' cultural competence. The pattern of relationships between nursing education and transcultural nursing reinforces evidence that education plays a significant role in fostering cultural understanding. The relationships between these keywords demonstrate the integration of education, skills, and empathy in multicultural nursing. This keyword map illustrates the significance of integrating theory and practice in cultivating cross-cultural competence.

The temporal trends, represented by color gradations on the keyword map, provide an overview of topic developments from 2016--2024. Green to yellow keywords, such as "cultural humility," "qualitative content analysis," and "undergraduate nursing students," indicate that newer themes are gaining more research attention. This indicates a shift in research focus from mere concept analysis to practical experiences and empathy-based learning. Healthcare education, which is linked to cultural competence, indicates a growing focus on integrating cultural values into the healthcare education curriculum.

The increasing number of studies involving qualitative content analysis also suggests a more in-depth qualitative approach to understanding cross-cultural experiences. Keywords such as "communication" and "international" remain relevant because they support strengthening communication skills in a global context. This visual pattern confirms that culture-based nursing continues to evolve in line with the demands of globalization and the mobility of healthcare workers. Therefore, this keyword and cluster analysis can serve as a foundation for determining the direction of future culture-based nursing research.

4. Final Considerations



On the basis of an analysis of articles published between 2015 and 2025, the field of transcultural skills in nursing practice and culture-based nursing education has experienced an increasing trend in publications. The United States contributed the most, followed by Asian countries such as the Philippines, South Korea, and China. The learning approaches used included culture-based clinical simulations, reflective learning, case-based training, and the integration of Leininger's transcultural nursing theory and the Campinha-Bacote model. These approaches effectively develop nursing students' transcultural skills, including cultural awareness, cultural knowledge, cultural sensitivity, and cross-cultural communication. These findings suggest that ethn nursing and cultural competence are crucial areas of focus in global nursing education and that they need to be continuously integrated into the curriculum to support nursing practices that are responsive to the cultural diversity of patients.

Ethical Considerations

Not applicable.

Conflict of Interest

The authors declare that they have no conflicts of interest.

Funding

The author would like to express his gratitude to the Regular Fund of the Ministry of Health's Semarang Health Polytechnic in 2024, with contract number HK.02.03/F.XV/2454/2025, in 2025.

References

- Afrizal, A., Dewi, S., & Silviana, I. (2023). The influence of self-efficacy and effective communication on patient education practices among nurses with nursing supervision as moderation at RSUP Dr. Sitanala Tangerang. *Arus Jurnal Sains dan Teknologi*, 1(1), 41–52. <https://doi.org/10.57250/ajst.v1i1.304>
- Alexander, S., BeLue, R., Kuzmik, A., & Boltz, M. (2020). The evolution of cultural competence theories in American (United States) nursing curricula: An integrative review. *Journal of Nursing Education and Practice*, 10(12), 30. <https://doi.org/10.5430/jnep.v10n12p30>
- Almutairi, A. F., McCarthy, A., & Gardner, G. E. (2015). Understanding cultural competence in a multicultural nursing workforce: Registered nurses' experience in Saudi Arabia. *Journal of Transcultural Nursing*, 26(1), 16–23. <https://doi.org/10.1177/1043659614523992>
- Anderson, K. I., Wallace, C. V., Bigger, S. E., & Narruhn, R. (2023). A critical discourse analysis of AACN's tool kit of resources for cultural competent education for baccalaureate nurses. *Global Qualitative Nursing Research*, 10, 1–16. <https://doi.org/10.1177/23333936231214420>
- Antón-Solanas, I., Huércanos-Esparza, I., Hamam-Alcober, N., Vanceulebroeck, V., Dehaes, S., Kalkan, I., Kömürçü, N., Coelho, M., Coelho, T., Casa-Nova, A., Cordeiro, R., Ramón-Arбуés, E., Moreno-González, S., & Tambo-Lizalde, E. (2021). Nursing lecturers' perception and experience of teaching cultural competence: A European qualitative study. *International Journal of Environmental Research and Public Health*, 18(3), 1–22. <https://doi.org/10.3390/ijerph18031357>
- Birhanu, M., Getnet, A., & Alem, G. (2023). Cultural competence and associated factors among nurses working in public health institutions in the Assosa zone, Benishangul-Gumuz regional state, Ethiopia, 2022. *BMC Nursing*, 22(1), Article 371. <https://doi.org/10.1186/s12912-023-01488-2>
- Byrne, D. (2020). Evaluating cultural competence in undergraduate nursing students using standardized patients. *Teaching and Learning in Nursing*, 15(1), 57–60. <https://doi.org/10.1016/j.teln.2019.08.010>
- Caglar, S., & Bilgili, N. (2020). Transcultural nursing care in Turkey. *Florence Nightingale Journal of Nursing*, 28(1), 110–123. <https://doi.org/10.5152/fnfn.2020.18008>
- Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, 13(3), 181–184. <https://doi.org/10.1177/10459602013003003>
- Chae, D., Kim, J., Kim, K., Ryu, J., Asami, K., & Doorenbos, A. Z. (2023). An immersive virtual reality simulation for cross-cultural communication skills: Development and feasibility. *Clinical Simulation in Nursing*, 77, 13–22. <https://doi.org/10.1016/j.ecns.2023.01.005>
- Chang, L., Chen, S.-C., & Hung, S.-L. (2018). Embracing diversity and transcultural society through community health practicum among college nursing students. *Nurse Education in Practice*, 31, 156–160. <https://doi.org/10.1016/j.nepr.2018.05.004>
- Degrie, L., Gastmans, C., Mahieu, L., De Casterlé, B., & Denier, Y. (2017). How do ethnic minority patients experience the intercultural care encounter in hospitals? A systematic review of qualitative research. *BMC Medical Ethics*, 18(1), 1–17. <https://doi.org/10.1186/s12910-016-0163-8>
- Farber, J. E. (2019). Cultural competence of baccalaureate nurse faculty: Relationship to cultural experiences. *Journal of Professional Nursing*, 35(2), 81–88. <https://doi.org/10.1016/j.profnurs.2018.09.005>
- Fioravanti, M. A., Hagle, H., Puskar, K., Knapp, E., Kane, I., Lindsay, D., Terhorst, L., & Mitchell, A. M. (2018). Creative learning through the use of simulation to teach nursing students screening, brief intervention, and referral to treatment for alcohol and other drug use in a culturally competent manner. *Journal of Transcultural Nursing*, 29(4), 387–394. <https://doi.org/10.1177/1043659617727832>
- Geleta, B. A., Radie, Y. T., & Areri, H. A. (2021). Exploring cultural competence of nurses and associated barriers in Ethiopian tertiary hospitals: A qualitative study. *Applied Nursing Research*, 62, Article 151511. <https://doi.org/10.1016/j.apnr.2021.151511>
- Gerchow, L., Burka, L. R., Miner, S., & Squires, A. (2021). Language barriers between nurses and patients: A scoping review. *Patient Education and Counseling*, 104(3), 534–553. <https://doi.org/10.1016/j.pec.2020.09.017>
- Hartini, Q. A. P., Wiyanto, Sudarmin, & Sumarni, W. (2025). Factors that influence the employability skills of vocational school students: A systematic review. *F1000Research*, 14, Article 586. <https://doi.org/10.12688/f1000research.164629.1>
- Herrero, R., Rojas, J., & Montoya-Juárez, R. (2018). Level of cultural self-efficacy of Colombian nursing professionals and related factors. *Journal of Transcultural Nursing*, 30(2), 137–145. <https://doi.org/10.1177/1043659618777047>



- Hidayat, A. A. A., Nasrullah, D., & Festy, P. (2013). Pengembangan model keperawatan berbasis budaya (etnonursing) pada keluarga etnis Madura dengan masalah balita gizi kurang di Kabupaten Sumenep. In *Prosiding Konferensi Nasional PPNi Jawa Tengah*.
- Im, E. O., Sakashita, R., Oh, E. G., Tsai, H. M., Chen, C. M., Lin, C. C., & McCauley, L. (2021). COVID-19 and nursing research across five countries/regions: Commonalities and recommendations. *Research in Nursing & Health, 44*(5), 758–766. <https://doi.org/10.1002/nur.22171>
- Kaveh, O., Charati, F. G., Kamali, M., & Mojarrad, F. A. (2022). Clinical nursing education during the COVID-19 pandemic: Perspectives of students and clinical educators. *BMC Nursing, 21*(1), 1–9. <https://doi.org/10.1186/s12912-022-01029-3>
- Khoiriyah, K., & Nursanti, I. (2024). Analisa teori transcultural nursing Madeleine Leininger. *Nusantara Hasana Journal, 3*(8), 192–202. <https://doi.org/10.59003/nhj.v3i8.1072>
- Kim, N., Kim, D.-H., & Park, J. (2019). Cultural competence level, its importance, and educational needs for cultural competence among nurses caring for foreigners in Korea. *Humanities and Social Sciences Reviews, 7*(5), 286–295. <https://doi.org/10.18510/hssr.2019.7534>
- Lamaluta, D., & Zulkifli, A. (2025). Penerapan model keperawatan transkultural dalam pelayanan kesehatan masyarakat multietnis. *Jurnal Kesehatan dan Keperawatan, 1*(1), 25–32. <https://journal.lpkd.or.id/index.php/Rentan/article/view/2195>
- Larsen, R., Mangrio, E., & Persson, K. (2021). Interpersonal communication in transcultural nursing care in India: A descriptive qualitative study. *Journal of Transcultural Nursing, 32*(4), 310–317. <https://doi.org/10.1177/1043659620920693>
- Li, C., Lin, Y., Tosun, B., Wang, P., Guo, H. Y., Ling, C. R., Qi, R., Luo, Q. Y., Wang, Y., Huang, F., Wang, J., Ma, S. H., Xu, D. F., Wu, S. Z., & Zhang, L. (2025). Psychometric evaluation of the Chinese version of the BENEFITS-CCCSAT based on CTT and IRT: A cross-sectional design translation and validation study. *Frontiers in Public Health, 13*, Article 1532709. <https://doi.org/10.3389/fpubh.2025.1532709>
- Maggio, L. A., Costello, J. A., Brown, K. R., Artino, A. R., Durning, S. J., & Ma, T. L. (2024). Time to publication in medical education journals: An analysis of publication timelines during COVID-19 (2019–2022). *Perspectives on Medical Education, 13*(1), 507–517. <https://doi.org/10.5334/pme.1287>
- Majda, A., Zalewska-Puchala, J., Bodys-Cupak, I., Kurowska, A., & Barzykowski, K. (2021). Evaluating the effectiveness of cultural education training: Cultural competence and cultural intelligence development among nursing students. *International Journal of Environmental Research and Public Health, 18*(8), Article 4002. <https://doi.org/10.3390/ijerph18084002>
- McFarland, M. R., Mixer, S. J., Wehbe-Alamah, H., & Burk, R. (2012). Ethnonursing: A qualitative research method for studying culturally competent care across disciplines. *International Journal of Qualitative Methods, 11*(3), 259–279. <https://doi.org/10.1177/160940691201100306>
- Messoudi, Y. El, Crespo, M. L., & Moral, J. L. (2023). Exploring education in cultural competence and transcultural care in Spanish for nurses and future nurses: A scoping review and gap analysis. *BMC Nursing, 22*, Article 320. <https://doi.org/10.1186/s12912-023-01483-7>
- Mojini, C. B., Abdullah, B. F., & Dioso, R. (2024). Enhancing cultural awareness: A qualitative exploration of nurses' perspectives on application of cultural competence in elder care. *Malaysian Journal of Nursing, 15*(4), 70–81. <https://doi.org/10.31674/mjn.2024.v15i04.009>
- Molato, B. J., & Sehularo, L. A. (2022). Recommendations for online learning challenges in nursing education during the COVID-19 pandemic. *Curationis, 45*(1), Article e2360. <https://doi.org/10.4102/curationis.v45i1.2360>
- Naviati, E., Afiyanti, Y., Allenidekania, A., & Novieastari, E. (2024). Cultural care behaviors of multidisciplinary health workers in preventing neutropenic fever in children with leukemia after chemotherapy: An ethnonursing study. *Jurnal Ners, 19*(1), 31–38. <https://doi.org/10.20473/jn.v19i1.5068>
- Nearagh, F. K., Ghasemi, S., Shariatpanahi, S., Dabaghi, S., & Sarbakhsh, P. (2025). The effects of an educational intervention based on the Campinha-Bacote model on cultural competence among nursing students: An experimental study. *BMC Nursing, 24*, Article 228. <https://doi.org/10.1186/s12912-025-02876-6>
- Novieastari, E., Gunawijaya, J., & Indracahyani, A. (2018). Pelatihan asuhan keperawatan peka budaya efektif meningkatkan kompetensi kultural perawat. *Jurnal Keperawatan Indonesia, 21*(1), 27–33. <https://doi.org/10.7454/jki.v21i1.484>
- Presley, D., & Zwane, S.-M. (2023). Empowerment of foreign nurses to develop self-efficacy in culturally competent care delivery. *Malaysian Journal of Nursing, 15*(2), 114–124. <https://doi.org/10.31674/mjn.2023.v15i02.013>
- Purnell, L. (2002). The Purnell model for cultural competence. *Journal of Transcultural Nursing, 13*(3), 193–196. <https://doi.org/10.1177/10459602013003006>
- Purwana, R., Novianti, W., Asrul, Siregar, R. B., Mariana, & Saputra, H. (2023). Kompetensi budaya dalam pelayanan kesehatan: Keterampilan bahasa Inggris pada perawat Muslim di lingkungan multikultural. *Journal Healthy Purpose, 2*(2), 112–116. <https://doi.org/10.56854/jhp.v2i2.267>
- Qin, Y., & Chaimongkol, N. (2021). Simulation with standardized patients designed as interventions to develop nursing students' cultural competence: A systematic review. *Journal of Transcultural Nursing, 32*(6), 778–789. <https://doi.org/10.1177/10436596211023968>
- Setyawati, A., & Nursanti, I. (2024). Conceptual model of nursing theory Madeleine Leininger with a fracture. *Nusantara Hasana Journal, 3*(8), 178–191. <https://doi.org/10.59003/nhj.v3i8.1071>
- Shahzad, S., Ali, N., Younas, A., & Tayaban, J. L. (2021). Challenges and approaches to transcultural care: An integrative review of nurses' and nursing students' experiences. *Journal of Professional Nursing, 37*(6), 1119–1131. <https://doi.org/10.1016/j.profnurs.2021.10.001>
- Songwathana, P., Chunuan, S., Balhithip, K., Purinthrapibal, S., Hui, T., Ibrahim, K., & Thuy, L. T. (2021). Cultural competence perspectives from nurses in four Asian countries: A qualitative descriptive study. *Journal of Health Science and Medical Research, 39*(1), 57–66. <https://doi.org/10.31584/jhsmr.2020767>
- South, L., & Phillips, C. (2004). Ethnography and ethnonursing: Research methods in nursing. *Nursing & Health Sciences, 6*(3), 159–165.
- Ton, D. N. M., Duong, T. T. K., Tran, H. T., Nguyen, T. T. T., Mai, H. B., Nguyen, P. T. A., Ho, B. D., & Ho, T. T. T. (2024). Effects of standardized patient simulation and mobile applications on nursing students' clinical competence, self-efficacy, and cultural competence: A quasi-experimental study. *International Journal of Environmental Research and Public Health, 21*(4), Article 515. <https://doi.org/10.3390/ijerph21040515>
- Tosun, B., Yava, A., Dirgar, E., Şahin, E. B., Yılmaz, E. B., Papp, K., Tóthová, V., Hellerová, V., Prosen, M., Ličen, S., Karnjus, I., Tamayo, M. D. B., Leyva-Moral, J. M., Claeys, A., & Tricas-Sauras, S. (2021). Addressing the effects of transcultural nursing education on nursing students' cultural competence: A systematic review. *Nurse Education in Practice, 55*, Article 103171. <https://doi.org/10.1016/j.nepr.2021.103171>
- Tosun, B., Yılmaz, E. B., Dirgar, E., Şahin, E. B., Hatipoğlu, K. P., & Yava, A. (2024). Evaluating the effectiveness of a new curriculum for transcultural nursing education: A mixed-method study. *BMC Nursing, 23*, Article 813. <https://doi.org/10.1186/s12912-024-02450-6>
- Wesołowska, K., Hietapakka, L., Elovainio, M., Aalto, A. M., Kaihlanen, A. M., & Heponiemi, T. (2018). The association between cross-cultural competence and well-being among registered native and foreign-born nurses in Finland. *PLoS ONE, 13*(12), Article e0208761. <https://doi.org/10.1371/journal.pone.0208761>
- Xu, E. S., Wang, R., Su, Y. H., Wu, Y. Y., Liu, X., & Duan, G. X. (2016). A preliminary multicultural nursing competence instrument for assessing undergraduate student nurses. *International Journal of Nursing Sciences, 3*(1), 71–78. <https://doi.org/10.1016/j.ijnss.2016.02.006>
- Yava, A., Tosun, B., Papp, K., Tóthová, V., Şahin, E., Yılmaz, E. B., Dirgar, E., Hellerová, V., Tricas-Sauras, S., Prosen, M., Ličen, S., Karnjus, I., Tamayo, M. D. B., & Leyva-Moral, J. M. (2023). Developing the Better and Effective Nursing Education for Improving Transcultural Nursing Skills Cultural Competence and Cultural Sensitivity Assessment Tool (BENEFITS-CCCSAT). *BMC Nursing, 22*(1), Article 331. <https://doi.org/10.1186/s12912-023-01476-6>

