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Evaluating the effect of cultural competency training in Nursing Education: A Mixed-Methods Approach

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Abstract

Background: The education of nurses requires essential cultural competency training because it provides students with the abilities needed to give fair services to patients from different cultural backgrounds in diverse healthcare environments. The recognized significance of culture competency training shows substantial variations when implemented throughout nursing programs, specifically in lower and middle-income countries, including Pakistan.

Aim: This research examined how students in their third and fourth year of nursing education at Swat, Pakistan, developed cultural competence through a structured educational program.

Methodology: The study utilized a mixed-methods research design that included pre-and post-training quantitative CCAT assessment protocols and post-training qualitative FGDs and interview assessments. This study enrolled 185 Bachelor of Science in Nursing students, 81.1% male and 18.9% female, in their third and fourth year. The research used convenience sampling as the enrollment method. The training period spanned six weeks and delivered content about cultural awareness, bias mitigation techniques, communication methods, and case-based simulation practices.

Results: All CCAT domains experienced marked positive changes based on group statistical analysis results ($p < 0.0001$ with mean score differences of knowledge 1.07, skills 1.12, and attitudes 0.95). Female nursing students obtained slightly better improvements compared to their male counterparts. Research participants indicated better empathetic abilities and communication skills during their training while they pointed to difficulties accessing support resources and few hands-on learning opportunities as fundamental barriers.

Conclusion: Nursing students acquire better readiness to provide patient care across diverse backgrounds through cultural competency training programs. To successfully implement cultural competency training, curriculum integration must be sustained while institutions offer support and practical learning opportunities.

Keywords: Cultural competence, nursing education, mixed-methods, patient-centered care, Pakistan.

Introduction

Healthcare professionals require cultural competency to develop their capacity to understand different cultural backgrounds and effectively interact with diverse patients. The discipline requires nurses to identify multicultural distinctions and respect other beliefs about health care techniques that must be accommodated when providing care. (1). Nursing education cultural competency training aims to train students how to give respectful, effective, and inclusive patient care across diverse healthcare settings. (2). Professional nursing education trains future qualified nurses through theoretical and clinical components, which form the academic and practical requirements for nurse certification. (3). The study investigates cultural competency instruction policies within nursing undergraduate programs that develop students' skills when interacting with diverse patient demographics.

Healthcare provider competence in understanding different cultures has become essential because patient communities worldwide keep growing more diverse. Cultural sensitivity embodies professional duty in nursing, and it is a desirable trait. Patients' Cultural beliefs determine how they experience their health problems, how they communicate their needs to caregivers, and what behaviors they demonstrate regarding their health. (3, 4). Nurses who lack cultural competence face the risk of patient communication failures resulting in lower patient satisfaction rates and non-adherence to received medical instructions, which in turn produces negative health results. Educational programs about cultural competency need incorporation into nursing training programs because they produce better healthcare results and decrease treatment disparities. (5, 6).

Nurses' cultural competence practice leads to better patient-provider communication, stronger therapeutic relationships, and elevated trust levels. (7). This area of training enables students to detect their personal biases, understand cultural values and patient needs, and develop customized communication and care delivery techniques. (8). Nursing professionals working in South African healthcare facilities that contain multiple ethnic groups need specialized training to adequately treat patients whose cultural and belief systems stand apart from their own. (9).

Numerous nursing universities worldwide now offer cultural competency classes, but the quality of those programs shows significant variability between schools. Educational programs that blend cultural material exist across multiple subject areas within certain institutions, but some other institutions provide this content through separated workshops or classes. (10, 11). Strong evidence exists regarding the impact of training methods on students' patient engagement attitudes and preparedness toward diverse populations, but further research needs to confirm their effectiveness. This examination aims to measure how educational sessions regarding cultural competence influence student preparation and enhance their work in mixed-culture clinical scenarios. (12).

Cultural competency education achieves its best results by combining what students learn and how they learn it. Educational methods that engage students through hands-on activities like role-playing, simulation, case study work, and reflective journal writing are thought to create better results than traditional theoretical education. (13). The training approach that provides real-life illustrations and chances to examine cultural biases leads to the most significant benefits for students. (14). Developing standardized, evidence-driven cultural education methods presents the main obstacle because these methods need recurring evaluation for progress. (15).

Numerous studies from multiple nations have shown the positive effects of cultural competency training in nursing education, leading to greater empathy, improved communication skills, and enhanced readiness to accommodate patient requirements across different cultures. (16). Standard education curricula throughout low- and middle-income nations, especially Pakistan and South Asia, do not include this training framework. Medical students learning nursing who will practice in multidimensional clinical settings need a

thorough assessment of their educational methods because they may not meet current requirements. (17).

The research examines how cultural competency produces lasting advantages that improve nursing professionals' growth and provide better patient care quality and satisfaction for healthcare providers while decreasing healthcare inequalities between groups. Nursing students who attain proper cultural competence training become flexible healthcare professionals suitable for employment in multiple international healthcare facilities. (18, 19). The interconnected nature of healthcare requires cultural competency to deliver safe, ethical, and patient-centered treatment, which transcends being optional. (20).

Healthcare professionals must focus on cultural competency development because it is an essential educational goal in contemporary nursing. Providing culturally sensitive medical care to diverse populations directly influences patient health results and health service fairness levels. The research investigates the impact of cultural competency training for undergraduate nursing students to identify better methods for nursing programs to prepare future practitioners for international health services. (21).

Methodology

This study employed a mixed-methods design to evaluate the effect of cultural competency training on undergraduate nursing students, combining both quantitative and qualitative approaches for a comprehensive analysis. Conducted across various nursing institutions in Swat, Pakistan, the research focused on third- and fourth-year Bachelor of Science in Nursing (BSN) students who had already been exposed to theoretical instruction and clinical practice. A convenience sampling technique was used to select 185 students from a total population of 300, based on Raosoft sample size calculations with a 95% confidence level and 5% margin of error. For the qualitative component, 15 participants were purposively selected from the quantitative group to participate in focus group discussions and semi-structured interviews, offering more profound insights into their experiences, perceptions, and application of culturally competent care in clinical settings.

Data Collection Procedure

Research data was collected during three months using quantitative and qualitative methods in two distinct phases. The Cultural Competence Assessment Tool was a pre- and post-training instrument to assess participant developments in cultural knowledge, skills, and attitudes through the CCAT questionnaire. The participants evaluated their agreement with culturally appropriate statements using a 5-point Likert scale throughout the questionnaire. To ensure reliability, the CCAT tool underwent a pilot test among 20 students not in the final sample. The **Cronbach's alpha** for internal consistency was found to be **0.87**, indicating high reliability. The triangulation of quantitative and qualitative findings further enhanced the **credibility** and **trustworthiness** of the study results. Research assistants with training delivered questionnaires to participants while they were in the classroom to guarantee both accuracy and understanding of the material. All students were asked to provide free consent during the initial stages before researchers gathered data. Participation remained optional throughout the study period. Researchers purposefully chose 15 participants to conduct focus group discussions (FGDs) and semi-structured interviews as part of their qualitative phase. The discussions took place in secluded private areas within the educational institution to guarantee minimum disclosure. All recorded sessions were performed after participants gave their consent to be recorded. The research team transcribed verbatim text from audio documents for later thematic assessment. The supervisor oversaw all procedures to verify ethical standards and methodological consistency.

Data analysis procedure

The researchers used SPSS version 26 to input and analyze their data. The study used descriptive statistics to report CCAT scores, participant demographic characteristics, frequencies, standard deviations, and mean scores. The study used paired t-tests to assess baseline and follow-up assessment results changes. Statistics judged significant occurred when P lessened below 0.05.

The thematic analysis was conducted using an NVivo software-based methodology. The research team used NVivo to create categories from coded transcripts. The research adopted Braun and Clarke's six-phase analytical framework through phases starting with data familiarization and initial code production. Theme searching was followed by a review and a definition of the theme until the final report was produced.

Ethical Considerations

The Institutional Review Board (IRB) of Pak-Swiss Nursing College provided ethical authorization for this study. All participants provided written consent to participate in the survey before researchers collected data. The researcher maintained confidentiality and anonymity through the use of coded identifiers as opposed to personal details. All participants received information about the right to stop participating in the study without any negative consequences.

Analysis and Result

Participant Demographics: The study primarily included males, who comprised 81.1% of the sample, while female participants accounted for 18.9%. The data distribution revealed that third-year students comprised 45.9% of the participants, and fourth-year students comprised 54.1%. Most study participants were 22 to 25 years old (59.5%), but students between 26 and 29 made up the remaining 40.5%. (Table 1).

Table 1: Descriptive Statistics for Participant Demographics

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	150	81.1%
	Female	35	18.9%
Academic Year	3rd Year	85	45.9%
	4th Year	100	54.1%
Age Range	22-25	110	59.5%
	26-29	75	40.5%

Figure 1: age of participants

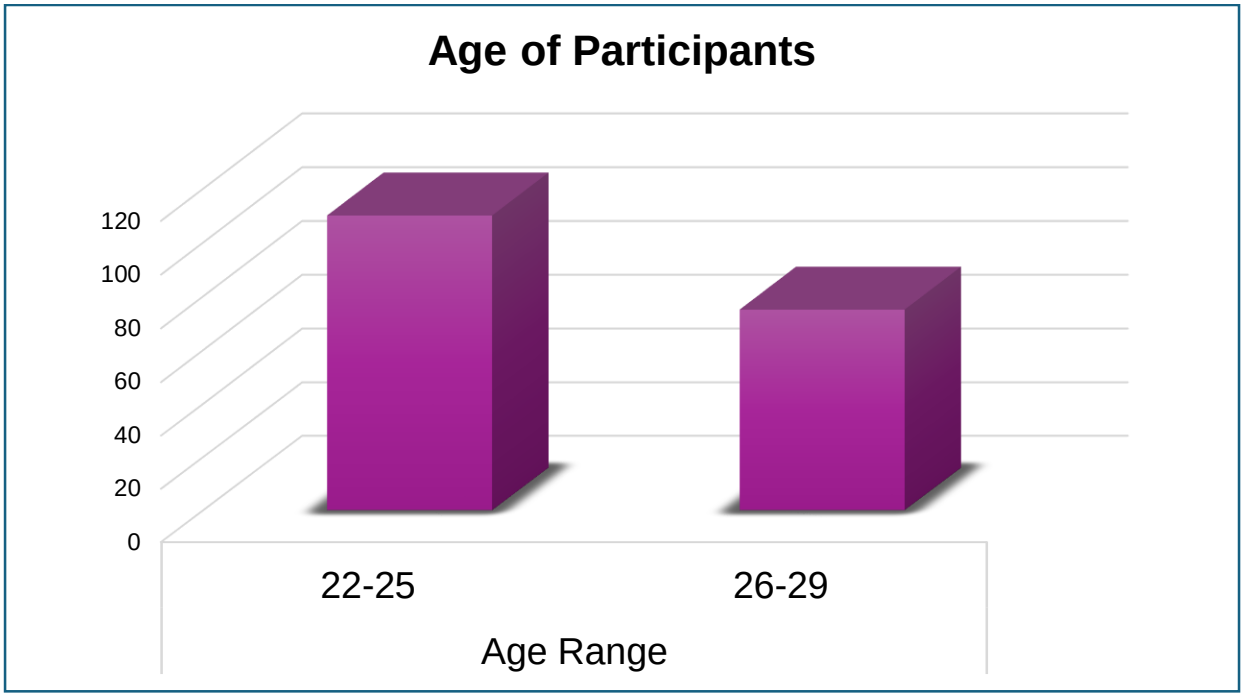


Figure 1 shows that most participants were aged 22–25, with fewer in the 26–29 age group, indicating a younger sample population overall.

Cultural Competence Assessment Tool (CCAT) Scores

The Cultural Competence Assessment Tool (CCAT) scores show significant improvements across all domains after the cultural competency training. The mean scores for knowledge, skills, and attitudes increased substantially from pre- and post-training, with mean differences of 1.07, 1.12, and 0.95, respectively. All changes were statistically significant ($p < 0.0001$). (Table 2).

Table 2: Quantitative Data - Cultural Competence Assessment Tool (CCAT) Scores

Group	Pre-Training Mean ± SD	Post-Training Mean ± SD	Mean Difference	t-value	p-value
Knowledge	3.05 ± 0.75	4.12 ± 0.68	1.07	9.56	0.0001
Skills	2.88 ± 0.81	4.00 ± 0.72	1.12	10.12	0.0001
Attitudes	3.10 ± 0.68	4.05 ± 0.55	0.95	8.23	0.0001

Changes in Cultural Competency (Post-Training) by Gender

The training program led to a notable improvement in cultural competence among all participants, including males and females. The training program initially led males who scored 3.10 ± 0.78 to reach 4.05 ± 0.67 after the intervention while producing a mean difference of 0.95 ($t = 7.56$, $p = 0.0002$). Female participants demonstrated a more significant mean difference in scores from 3.00 ± 0.72 pre-training to 4.12 ± 0.69 post-training, yielding 1.12 ($t = 9.45$, $p = 0.0001$). The cultural competence scores of all participants demonstrated significant improvement since the start of training as their p-values remained lower than 0.05. (Table 3).

Table 3: Changes in Cultural Competency (Post-Training) by Gender

Gender	Pre-Training Mean ± SD	Post-Training Mean ± SD	Mean Difference	t-value	p-value
Male	3.10 ± 0.78	4.05 ± 0.67	0.95	7.56	0.0002
Female	3.00 ± 0.72	4.12 ± 0.69	1.12	9.45	0.0001

Thematic Analysis

Most participants in the qualitative section stressed the necessity of cultural competency training for nursing to enhance communication and empathetic care delivery. Students reported

difficulties stemming from non-existing institutional backing and minimal opportunities to apply cultural learning in practice. Participants viewed these barriers as the main obstacles in effectively executing cultural competency programs for clinical practice. Most participants recognized that these training programs increase the quality of communication between nurses and patients and their overall healthcare delivery. (Table 4).

Table 4: Thematic Analysis of Qualitative Data - Focus Group Discussions (FGDs)

Theme	Sub-theme	Frequency of Mention
Perception of Cultural Competency	Understanding of cultural diversity	12/15
	Importance of cultural training in nursing care	14/15
Application in Clinical Settings	Improved patient-nurse communication	13/15
	Enhanced empathy and patient rapport	11/15
Barriers to Implementation	Lack of institutional support	8/15
	Limited real-life practice opportunities	7/15

Themes and Sub-Themes in Students' Perceptions of Cultural Competency Training

Research showed that cultural competency training increased student mastery of healthcare cultural traditions and value standards. Study participants were more prepared to use learned knowledge when caring for diverse patients in clinical environments. Language and cultural miscommunication proved significant obstacles for clinical staff during their practice. Additional hands-on role-playing sessions, as well as enhanced cultural competence teaching in the nursing curriculum, were suggested by students to develop their learning further. (Table 5).

Table 5: Themes and Sub-Themes in Students' Perceptions of Cultural Competency Training

Theme	Description
Cultural Awareness	Students reported a better understanding of different cultural practices and values in healthcare.
Clinical Application	Participants expressed confidence in applying cultural competence in clinical scenarios, especially with diverse patient populations.
Challenges Faced	Students mentioned language barriers and cultural misunderstandings as persistent challenges in clinical settings.
Suggestions for Improvement	Students suggested more practical sessions, including role-playing exercises, and greater integration of cultural competence in the curriculum.

Discussion

This research delivers essential data about how cultural competency training affects undergraduate nursing students because it shows marked progress in their cultural understanding abilities and interpersonal competencies after training. Previous studies confirmed that nursing programs must focus on cultural competency education, as demonstrated by these research results and delivered research results that parallel this study. Cultural competence training enhances nursing abilities to treat diverse patients through better interpersonal communication and adaptive empathy. (22, 23).

The Cultural Competence Assessment Tool (CCAT) demonstrated substantial score enhancements ($p < 0.0001$) throughout its entire domain composition of knowledge, skills, and attitudes after the training concluded. According to his previous research, cultural competency

training leads to better understanding and improved attitudes toward cultural diversity. (24). The study contributes to existing literature by quantitatively demonstrating meaningful cultural competence improvements in nursing students from pre- and post-training tests, proving the long-term effectiveness of training programs. (25).

The study reveals that male and female students enhanced cultural proficiency, although female students registered a marginally better mean score change. The research finding supports the observation that female nurses tend to display more favorable attitudes toward cultural competence. Although female students showed more significant cultural competence improvements, their total program effectiveness was not affected significantly. (26).

The results from the qualitative data analysis brought forward key aspects that described the cultural competence training process. Studies validated this finding as cultural competence enabled nursing students to improve their relationship with patients and achieve better healthcare results through improved patient-provider communication. (27). Participants in the study recognized significant implementation barriers related to cultural competency in clinical settings, including insufficient institutional backing and chances for practical skill application. These research results show institutional and organizational barriers restricting effective cultural competency integration in healthcare environments. (28).

When treating diverse populations, healthcare professionals face comparable language trouble and cultural interpretation issues (29). A significant clinical challenge appears through inadequate communication among patients who speak different languages because many patients show poor mastery of the predominant language. Healthcare institutions must establish interpreter services and cultural competence workshops since this strengthens the requirement for extra resources to improve patient care. (30).

The educational experience was improved through students' recommendations, including practical instruction and role-playing activities for effective hands-on training. Integrating practical exercises serves as a core recommendation that meets the findings reported in the research. (31) Role-playing exercises and simulations strengthen nursing education through real-world preparation that emphasizes the essential practice of cultural sensitivity for delivering both practical and compassionate healthcare. (32).

The study participants emphasized that nursing students require better opportunities for cultural competency training to develop their ongoing education in this field. The findings and recommendations support integrating cultural competency education across nursing curricula to equip nurses to serve diverse patients (34). Nursing education programs require cultural competence training to develop competent future nurses who offer respect-based services to diverse patients.

Conclusion

Research results from this assessment prove that cultural competency training succeeds in developing better nursing student understanding regarding diverse cultural perspectives, together with stronger competencies and different attitudes. Training programs aimed at cultural competence should become an essential component of nursing curricula because the students show substantial improvement in cultural competency after completion. Evaluating institutional support for implementation alongside minimizing practical application restrictions will lead to the lasting success of these programs. Future research should investigate how long-term cultural competency instruction works alongside healthcare organizations' support for integrating cultural competence standards into clinical settings.

Recommendation:

The educational outcome for cultural competency in nursing requires continuous integration of cultural training across nursing programs using role-playing sessions alongside clinical exposure to various healthcare environments. Nurses need institutional backing that includes language barrier solutions for better patient care. The training effectiveness will be ensured through combining ongoing staff development efforts with student-driven assessment methods.

To build stronger cultural competence in nursing education, institutions should focus on developing diverse faculty teams, creating joint training programs with various communities, and establishing standardized educational standards. Research must explore how cultural competency training affects the long-term development of nursing practice and patient care results.

Limitation:

The study contains several constraints that could reduce the ability to generalize its results—using convenience sampling from a particular geographic region to choose participants results in potential limitations because it does not represent all nursing students throughout different regions and countries. The research collected data through self-reports that could introduce response biases such as social desirability and recall bias during both quantitative and qualitative phases. The qualitative study involved limited participant numbers, which constrained the depth of individual viewpoint collection. The research period was short and failed to assess the complete effects of cultural competency instruction on clinical expertise and medical care results throughout prolonged periods.

Reference

Díez F, Villa A, López AL, Iraurgi I. Impact of quality management systems in the performance of educational centers: educational policies and management processes. Heliyon. 2020 Apr 1;6(4).

Bensimon EM, Malcom L, editors. Confronting equity issues on campus: Implementing the equity scorecard in theory and practice. Taylor & Francis; 2023 Jul 3.

Long DA. Equity, not just equality: how equality of educational outcome policies could help narrow excellence and identification gaps. Gifted Child Quarterly. 2022 Apr;66(2):105-7.

Shayestehfard M, Torabizadeh C, Gholamzadeh S, Ebadi A. Ethical sensitivity in nursing students: Developing a context–based education. Electronic Journal of General Medicine. 2020;17(2).

Antón-Solanas I, Tambo-Lizalde E, Hamam-Alcober N, Vanceulebroeck V, Dehaes S, Kalkan I, Kömürcü N, Coelho M, Coelho T, Casa Nova A, Cordeiro R. Nursing students' experience of learning cultural competence. PLoS One. 2021 Dec 17;16(12):e0259802.

Vella E, White VM, Livingston P. Does cultural competence training for health professionals impact culturally and linguistically diverse patient outcomes? A systematic review of the literature. Nurse education today. 2022 Nov 1;118:105500.

Berie KM, Salih MH, Abate HK. Cultural competence nursing care and its associated factors among nurses in northern Ethiopia: a mixed method study design. Nursing: Research and Reviews. 2021 Dec 15:55-67.

Shopo KD, Rabie T, Du Preez A, Bester P. Experiences of midwives regarding provision of culturally competent care to women receiving maternal care in South Africa. Midwifery. 2023 Jan 1;116:103527.

Ramathuba DU, Ndou H. Ethical conflicts experienced by intensive care unit health professionals in a regional hospital, Limpopo province, South Africa. Health SA Gesondheid. 2020;25.

Patton LD, editor. Culture centers in higher education: Perspectives on identity, theory, and practice. Taylor & Francis; 2023 Jul 3.

White JL, Chávez AF, Longerbeam SD. Teaching across cultural strengths: A guide to balancing integrated and individuated cultural frameworks in college teaching. Routledge; 2023 Jul 3.

Müller C, Mildenberger T, Steingruber D. Learning effectiveness of a flexible learning study programme in a blended learning design: why are some courses more effective than others?. International Journal of Educational Technology in Higher Education. 2023 Feb 17;20(1):10.

Ly CK. Applying Role-Play Technique on Improving EFL Students' Language Learning: A Case Study at a Vietnamese University. Journal of Knowledge Learning and Science Technology ISSN: 2959-6386 (online). 2024 Jul 28;3(4):1-0.

Steiner E, Dray A, Ulloa JG, Garcia C, Ghazoul J. "I remember your lecture": role-playing games and unconventional teaching reinforce learning outcomes. ETH Learning and Teaching Journal. 2020 Sep 14;2(1):82-93.

Valladares Ríos L, Acosta-Diaz R, Santana-Mancilla PC. Enhancing self-learning in higher education with virtual and Augmented Reality Role Games: Students' perceptions. InVirtual Worlds 2023 Oct 30 (Vol. 2, No. 4, pp. 343-358). MDPI.

Shin M, Na H, Kim S. Enhancing cultural competency and empathy toward foreign patients for Korean nursing students through a simulation: A quasi-experimental study. Nurse education in practice. 2023 May 1;69:103615.

Tosun B, Yava A, Dirgar E, Şahin EB, Yılmaz EB, Papp K, Tóthova V, Hellerova V, Prosen M, Licen S, Karnjus I. Addressing the effects of transcultural nursing education on nursing students' cultural competence: A systematic review. Nurse Education in Practice. 2021 Aug 1;55:103171.

Young S, Guo KL. Cultural diversity training: the necessity of cultural competence for health care providers and in nursing practice. The health care manager. 2020 Apr 1;39(2):100-8.

Vella E, White VM, Livingston P. Does cultural competence training for health professionals impact culturally and linguistically diverse patient outcomes? A systematic review of the literature. Nurse education today. 2022 Nov 1;118:105500.

Slobodin O, Kula Y, Clempert N, Cohen O. Building capacity in times of crisis: Increasing cultural competence of healthcare professionals in the context of the COVID-19. Journal of Clinical Nursing. 2021 Jun 10.

Gordon EJ, Romo E, Amórtegui D, Rodas A, Anderson N, Uriarte J, McNatt G, Caicedo JC, Ladner DP, Shumate M. Implementing culturally competent transplant care and implications for reducing health disparities: a prospective qualitative study. Health Expectations. 2020 Dec;23(6):1450-65.

Farokhzadian J, Nematollahi M, Dehghan Nayeri N, Faramarzpour M. Using a model to design, implement, and evaluate a training program for improving cultural competence among undergraduate nursing students: a mixed methods study. BMC nursing. 2022 Apr 11;21(1):85.

Majda A, Zalewska-Puchała J, Bodys-Cupak I, Kurowska A, Barzykowski K. Evaluating the effectiveness of cultural education training: Cultural competence and cultural intelligence development among nursing students. International Journal of Environmental Research and Public Health. 2021 Jan;18(8):4002.

Young S, Guo KL. Cultural diversity training: the necessity of cultural competence for health care providers and in nursing practice. The health care manager. 2020 Apr 1;39(2):100-8.

Lekas HM, Pahl K, Fuller Lewis C. Rethinking cultural competence: Shifting to cultural humility. Health services insights. 2020 Dec;13:1178632920970580.

Teresa-Morales C, Rodríguez-Pérez M, Araujo-Hernández M, Feria-Ramírez C. Current stereotypes associated with nursing and nursing professionals: An integrative review. International journal of environmental research and public health. 2022 Jun 22;19(13):7640.

Arruzza E, Chau M. The effectiveness of cultural competence education in enhancing knowledge acquisition, performance, attitudes, and student satisfaction among undergraduate health science students: a scoping review. Journal of Educational Evaluation for Health Professions. 2021 Feb 24;18.

Farokhzadian J, Nematollahi M, Dehghan Nayeri N, Faramarzpour M. Using a model to design, implement, and evaluate a training program for improving cultural competence

among undergraduate nursing students: a mixed methods study. BMC nursing. 2022 Apr 11;21(1):85.

Al Shamsi H, Almutairi AG, Al Mashrafi S, Al Kalbani T. Implications of language barriers for healthcare: a systematic review. Oman medical journal. 2020 Apr 30;35(2):e122.

Escobedo LE, Cervantes L, Havranek E. Barriers in healthcare for Latinx patients with limited English proficiency—a narrative review. Journal of general internal medicine. 2023 Apr;38(5):1264-71.

Izquierdo M, Merchant RA, Morley JE, Anker SD, Aprahamian I, Arai H, Aubertin-Leheudre M, Bernabei R, Cadore EL, Cesari M, Chen LK. International exercise recommendations in older adults (ICFSR): expert consensus guidelines. The journal of nutrition, health & aging. 2021 Jul;25(7):824-53.

LoBiondo-Wood G, Haber J. Nursing research E-book: methods and critical appraisal for evidence-based practice. Elsevier Health Sciences; 2021 Jun 29.

Brottman MR, Char DM, Hattori RA, Heeb R, Taff SD. Toward cultural competency in health care: a scoping review of the diversity and inclusion education literature. Academic Medicine. 2020 May 1;95(5):803-13.