Original Research

Comparative analysis of cultural competence of senior and junior nursing students

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Abstract

Background: Cultural competence (CC) is essential for nurses because cultural diversity challenges health care providers, especially nurses, to provide culturally competent care to diverse populations. Cultural competence training in nursing education is a timely need in Sri Lanka and worldwide.

Objective: The purpose of this study is to compare the level of cultural competence between senior and junior student nurses studying in the School of Nursing at Kurunegala and Vavuniya to identify how current nursing education influences CC improvement.

Methods: A comparative descriptive cross-sectional study was conducted in Schools of Nursing, Vavuniya and Kurunegala, Sri Lanka. A systematic random sampling technique was used to select participants from first and third-year nursing students. Data were collected by a validated self-administered questionnaire and analysed using Statistical Packages for Social Sciences (SPSS) version 22. Ethical approval was obtained from the Ethics Review Committee of the Faculty of Medicine, Colombo, Sri Lanka.

Results: The mean score of junior student nurses' CC was 3.72 (SD±0.38). The mean scores of cultural awareness, cultural knowledge, cultural skills, cultural encounter, and cultural desire of junior student nurses were 3.80 (±0.37), 3.55 (±0.54), 3.48 (±0.71), 3.54 (±0.56) and 4.26 (±0.46), respectively. The mean score of CC of senior student nurses was 3.92 (SD±0.28), and the mean scores of cultural awareness, cultural knowledge, cultural skill, cultural encounter, and cultural desire were 3.94(±0.35), 4.00 (±0.38), 3.77 (±0.50), 3.63 (±0.44), and 4.29 (±0.49), respectively. Independent sample t-test indicated no significant difference between the senior and junior student nurses when compared to CC ($p = 0.697$).

Conclusion: The CC was at a moderate level for both junior and senior students and there is an essential need to increase it to the highest level possible due to the cultural diversity of the patients that they have to provide healthcare in Sri Lanka.

Keywords: Junior student nurse, Senior student nurse, Cultural competence

Background

Cultural diversity is increasing globally, and it is a challenge for health care providers, especially nurses, to provide competent care to diverse populations. Nursing care should be individualised and based on the cultural, racial, and ethnic diversity of patients and their families [1]. According to historical evidence, the concept of cultural competence in the nursing profession could be drawn from the 19th century in the days of Florence Nightingale, who developed a growing concern for cultural needs in healthcare system delivery. This was evident when English nurses carried out health delivery services in India in the 1950s. They absorbed the cultural lifestyle of the Indian patients, resulting in the introduction of a transcultural nursing system as a major area of study for the practice of nursing by providing culturally appropriate care and love for their patients [2].

Cultural competence starts with the knowledge of understanding other people's cultural practices and

the acceptance that their culture cannot be shared. There were common elements in all theories about cultural competence, but the definitions of cultural competence vary. According to Leininger, Cultural competence was defined as "a legitimate and formal area of study, research, and practice, focused on culturally-based care, values, and practices to help cultures or subcultures maintain or regain their health and face disabilities or death in culturally congruent and beneficial caring ways" [3, p.32]. Purnell defined that "cultural competence can be attained when individuals develop an awareness of their existence, including their sensations, thoughts, and environment. Besides, cultural competence requires health care providers to demonstrate an understanding of the culture of the client and respect for differences in culture" [4, p.8]. Campinha-Bacote defined cultural competence as "the process in which the healthcare professional continually strives to achieve the ability and availability to effectively work within the cultural context of a client (individual, family, or community) and the constructs of cultural competence are cultural awareness, cultural knowledge, cultural skill, cultural encounter, and cultural desire" [5, p. 181].

Previous studies have demonstrated that a lack of CC contributes to health disparities, poor health outcomes, cultural conflicts, and non-compliance [6]. Therefore, this deficiency in cultural competence creates a gap between the nurse and patient-centred safe care and creates a challenge to caring for diverse populations. Hence, nursing educators have a great responsibility to prepare nurses skilled at cultural competence. Nursing students are continuously evaluated on clinical skills and knowledge, but assessments of their cultural competence are lacking. Thus, there is an essential need to identify the level of cultural competence among nurses because it is a component of quality practice that leads to improving health outcomes for patients, families, nurses, and the health care system.

Studies revealed that most nurses had moderate cultural competence in different countries [7-9]. In Sri Lanka, Senarathne [10] revealed the same findings that student nurses in the final year had a moderate level of cultural competence. As a result, the researchers suggested that more studies need to be conducted to determine how the current nursing education system helps to improve the cultural competence of the student nurses by comparing the cultural competence of junior students who had no education in cultural competence and clinical experience with diverse patients to senior students who had education in cultural competence and clinical experience with diverse patients.

Objective

This study aims to compare the cultural competence level of senior and junior student nurses in the Schools of Nursing at Kurunegala and Vavuniya.

Methods

A comparative descriptive cross-sectional design was undertaken. All third-year (senior) and first-year (junior) student nurses in the School of Nursing in Kurunegala and Vavuniya represented the study population. A systematic random sampling technique was employed for this study. Every third person was chosen from the student registers (750/300 = 2.5) in each batch and each nursing school. The sample size was 255, according to Rao soft online sample calculator [11]. Therefore, 150 participants from the first year and 150 participants from the third year were recruited proportionately from both schools for the study, with an allowance for anticipated nonresponses. Male and female nursing students in their third year and first year were included in the sample. The students who were sick during the study were excluded.

A pretested self-administered questionnaire was used to collect data. It was developed by the researcher based on previous studies [11, 13-16] and mainly according to the five constructs of the Campinha Bacote Model viz. cultural awareness, cultural knowledge, cultural skills, cultural encounter, and cultural desire [12]. Face validity and criterion validity were assessed by experts in the subject matter. Reliability was confirmed by Cronbach's alpha (0.9). The questionnaire includes two parts: Part A–sociodemographic data, Part B–questions to recognise cultural competence. This part B consists of 42 items and rates the five constructs of the Campinha Bacote Model. A point value is assigned to each response. For instance, strongly agree–5 points, agree–4 points neutral–3 points, disagree–2 points and strongly disagree–1 point were given. Once the value of a student's responses has been determined, the level of cultural competence can be determined. Cultural competence value is the mean value of the scores given for part B. The following are the values for each level

of cultural competence and higher scores depict a high level of cultural competence: 1–1.99 Poor competence level; 2–2.99 Mild competence level; 3–3.99 Moderate competence level; and 4–5 High competence level.

The questionnaire was developed in English and translated into Sinhala and Tamil languages. Descriptive and comparative statistical analysis was done using SPSS version 22. Informed written consent was obtained from the students before data collection, and voluntary participation in the study was ensured. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medicine, Colombo, and relevant permission from the Schools of Nursing in Kurunegala and Vavuniya.

Results

One hundred and fifty junior students and 150 senior students responded, yielding an overall 100% response rate.

Demographic data

Table 1 summarises the sociodemographic details. The majority of the participants were females in both junior and senior student nursing batches. Most participants were in the 20-22 year age group in the junior batch (53.3%), whereas most of the participants were in the 23-25 year age group in the senior batch (88.7%).

The junior batch included 88.7% Sinhala, 10.6% Tamil, and 0.7% Muslims. Similarly, the senior batch included 84.6% Sinhala, 12.7% Tamil, and 2.7% Muslims. Most participants identified themselves as Buddhists (81.4% of senior students and 85.3% of junior students) in both batches; Christians, Catholics, Hindus, and Islam participants were few in both batches. Most participants were comfortable only with the Sinhala language to communicate with the clients (junior-48.6%; senior-42.7%). However, a considerable number of participants could communicate in Sinhala and English (junior-38.7%; senior-40%) while a lesser number of participants could communicate in Sinhala, Tamil, and English (junior-2%; senior-5.3%) (Table 1). All participants in the senior and junior batches (n = 300, 100%) agreed that they met Sinhala, Tamil, Muslim, and Burgher clients in their clinical practice.

Comparison of cultural competence of junior and senior student nurses

The mean score of cultural awareness, cultural knowledge, cultural skills, cultural encounter, and cultural desire among junior student nurses was 3.80 (±0.37), 3.55 (±0.54), 3.48 (±0.71), 3.54 (±0.56), and 4.26 (±0.46) respectively. The mean score of cultural competence of junior student nurses was 3.72 (±0.38). In the senior batch, the mean scores of cultural awareness, cultural knowledge, cultural skills, cultural encounter, and cultural desire were 3.94 (±0.35), 4.00 (±0.38), 3.77 (±0.50), 3.63 (±0.44), and 4.29 (±0.49) respectively. The mean score of cultural competence of senior student nurses was 3.92 (±0.28). Table 2 compares the mean competence level of subscales and the overall mean of cultural competence of junior and senior student nurses. The independent samples T-test analysis showed cultural competence has no significant relationship with the learning year (senior or junior) ($p = 0.697$).

Discussion

This descriptive comparative study was conducted to compare the cultural competence levels of senior and junior student nurses studying in the Schools of Nursing in Kurunegala and Vavuniya. In contrast to Gwanmesia [8] and Reyes [17], who showed a significantly higher level of cultural competence among senior students/graduate nurses than the junior students/graduate nurses who began their career, this study revealed that there is no significant difference in cultural competence between senior and junior student nurses. Furthermore, both groups have a moderate level of cultural competence. Therefore, it is necessary to determine the underlying cause of a moderate level of cultural competence to address it.

Junior student nurses may not have a proper education and practice in cultural competence as needful to the healthcare sector because they are still in the first semester of the Diploma in Nursing course. On the other hand, senior student nurses should have a higher level of cultural competence as they have almost completed the course. However, the current study shows a moderate level of cultural competence among both senior and junior student nurses. Since the people in Sri Lanka live in a culturally diverse environment, every person could have a level of cultural competence,

and it can be the entry-level cultural competence shown by junior nursing students. In addition, since there is no significant improvement in cultural competence among the senior student nurses when compared with the junior student nurses, it is necessary to identify whether the current nursing education system in Sri Lanka offers the desired level of cultural competence for students who will become registered nurses eventually.

The question emerging here is, "does the nursing curriculum make any special effort to enhance the cultural competence of nursing students, while they are reaching to the top from the bottom"?. It is worthwhile to explore further whether the reason for this insignificant development of cultural competence is due to the inadequate content in the curriculum to address cultural competence or any other.

As further support to this question, McArthur revealed a significant relationship between cultural competence preparation and a consistent combination of cultural competence in nursing courses taught [18]. Therefore, evaluating the curriculum content and combination of concepts on cultural competence with other subjects or courses in every nursing school and nursing faculty in Sri Lanka is essential. Haller [19] also suggested enhancing the cultural competence of Nurse Educators through professional education and training programmes at an individual level. Furthermore, previous studies have highlighted the existence of significantly different competence levels among senior and junior nursing students/nurses [8, 17].

Considering these findings, the author suggests revising the existing nursing education curriculum to be able to provide more opportunities to enhance the cultural competence of student nurses. It can be done through professional education and training programmes. It will help enhance the individual level of cultural competence of student nurses.

Since student nurses have moderate cultural competence, it can be further improved by providing opportunities for clinical experience by selecting patients from diverse backgrounds, and also by using case studies. Using a variety of teaching strategies is vital in teaching cultural competence concepts to undergraduate nursing students [8]. Since the participants in this study have strongly indicated their desire to develop cultural competence, introducing some workshops and knowledge development sessions will also be useful for students who are currently in nursing schools.

The limitations of the study were as follows; Data were obtained through the self-administered questionnaire by the participant rather than measuring actual behaviour. It may have provided an opportunity for the participants to provide socially acceptable answers rather than stating the true situation. Furthermore, this questionnaire was only subjected to face and criterion validation, which resulted in a research limitation.

Conclusions and recommendations

This study revealed that both senior and junior nursing students have a moderate level of cultural competence, which is below the expected level of a healthcare professional in a culturally diverse country like Sri Lanka. Because of the cultural diversity, it is necessary to increase student nurses' cultural competence to the highest possible level before becoming a registered nurse.

Conducting a similar study covering the other nursing schools and nursing faculties is recommended to ensure the generalizability of the findings. Further studies are required to examine Nurse Educators' cultural competence level. Further, assessments for the curricula are necessary to recognise the adequacy of the cultural competence components in the curriculum.

Author declaration

Author contributions: All authors contributed to the conceptualization and design of the study. HSS contributed to the acquisition of data and conducted the data analysis. HSS and MKDLM contributed to data interpretation and writing the manuscript. All authors read and approved the final manuscript.

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Table 1: Comparison of demographic data of junior and senior student nurses

		Junior		Senior	
		n	%	n	%
Sex	Male	10	6.8	6	4.0
	Female	140	93.0	144	96
Age	20-22 years	80	53.3	23	2.0
	23-25 years	70	46.7	133	88.7
	26-28 years	-	-	14	9.3
Education level	Up to A/L	143	95.3	124	82.6
	Diploma	6	4.0	25	16.7
	Graduate	1	0.7	1	0.7
Ethnicity	Sinhala	133	88.7	127	84.6
	Tamil	16	10.6	19	12.7
	Muslim	1	0.7	4	2.7
Religion	Buddhist	125	85.3	122	81.4
	Christian	5	3.3	5	3.3
	Catholic	6	4.0	5	3.3
	Hindu	10	6.7	14	9.3
	Islam	1	0.7	4	2.7
Comfortable Languages	Only Sinhala	73	48.6	64	42.7
	Only English	-	-	-	-
	Only Tamil	6	4.0	7	4.7
	Sinhala & English	58	38.7	60	40
	Sinhala & Tamil	3	2.0	3	2.0
	English & Tamil	7	4.7	8	5.3
	Sinhala, Tamil & English	3	2.0	8	5.3

Table 2: Comparison of the mean competence level of subscales and overall mean of the cultural competence of junior and senior student nurses

	Junior		Senior	
	Mean	SD	Mean	SD
Cultural awareness	3.80	0.37	3.94	0.35
Cultural knowledge	3.55	0.54	4.00	0.38
Cultural skill	3.48	0.71	3.77	0.50
Cultural encounter	3.54	0.56	3.63	0.44
Cultural desire	4.26	0.46	4.29	0.49
Cultural competence	3.72	0.38	3.92	0.28