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Cultural competence course for nursing students in Taiwan: A longitudinal study

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SUMMARY

Background: Culturally competent care is an essential ability for nursing students. However, little is known about the effects of educational intervention on attitudes or behavior changes with regard to cultural competence in Taiwan.
Purpose: This study evaluates the effects of a cultural competence course for nursing students.
Methods: Using a longitudinal study design, 105 participants were assigned to an experiment group (51 participants) and control group (54 participants) based on the school they attended. Students in the experiment group received a two-credit course on cultural competence care. Using the Cultural Competence Assessment Instrument-Chinese Version (CCA-CV), data were collected between 2012 and 2013 at three points in time: before and after the course and again 6 to 8 months after the two groups (experiment and control) had completed the clinical practicum.
Results: The results of a generalized estimating equation (GEE) analysis indicate that the cultural competence of all participants had improved at the posttest assessment, with the experiment group showing a significantly better improvement over the control group. However, the overall effectiveness of the training diminished with time. This study supports that taking a cultural competence course effectively enhances the cultural competence of nursing students for a limited period of time immediately following the course.
Conclusions and Applications: These results support that the benefits of incorporating a cultural competence course in clinical practice should be considered in the future. Furthermore, healthcare institutions should be encouraged to provide greater support and consideration to cultural competence issues in the nursing workplace in order to reinforce and extend the benefits of cultural competence courses provided at nursing schools.

Introduction

Background

Due to globalization and a growing immigrant population in Taiwan, nursing students entering the current healthcare arena face an increasingly complex environment that increasingly requires that they interact with and care for patients of different cultural and ethnic backgrounds (Caplan and Black, 2014). Therefore, it is urgent to assist these students to obtain the skills necessary to work effectively with these diverse populations/clients. These skills encompass culturally competent care and entail gaining an adequate understanding of the cultural factors that influence individual health beliefs and behaviors.

Heightened levels of cultural competence have been proposed as a key strategy to enable the elimination of health disparities by facilitating effective clinical encounters and improving quality of care (Allen et al., 2013; Hall et al., 2014; Noble et al., 2014; Lu et al., 2014). Cultural competence has gained recognition as a critical and essential component of nursing education and as an important skill that prepares nursing students to care for patients from diverse backgrounds. This concept is well accepted and has been incorporated into many national-level initiatives and organizations such as the American Association of Colleges in Nursing (AACN). To address the challenge of fostering cultural competence in frontline healthcare workers, the AACN and other organizations have advocated that universities integrate cultural competence into the nursing curriculum (AACN, 2008; Noble et al., 2014; Tavallali et al., 2013; Morton-Miller, 2013; Hayward and Li, 2013; McClimens et al., 2014). The systematic evaluation of cultural competence in the

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nursing curriculum is essential to ensure the integrity of nursing programs (Schug, 2012). Additionally, these interventions are essential to optimal team functioning (Delgado et al., 2013; Powell, 2012; Lange et al., 2013).

Further development and evaluation of cultural competence educational interventions is required (Noble et al., 2014). The AACN (2008) outlined five steps to be incorporated into the nursing curricula in Taiwan as a cultural competence prerequisite for baccalaureate nursing students. These steps are: (1) prioritize the social and cultural factors that affect healthcare when designing and delivering care across multiple contexts; (2) use relevant data sources and best evidence when providing culturally competent care; (3) promote safe and high-quality healthcare for diverse populations; (4) use transform systems to address social justice and healthcare disparities; and (5) participate in continuous cultural competence development (AACN, 2008, 2009).

Cultural Competence: A Brief Review

Leininger (1978) defined cultural competence as the cognitive-based supportive, facilitative, or enabling acts or decisions that are tailored to the cultural values and beliefs of an individual, group, or institution. According to Leininger, the purpose of cultural competence is to provide or support meaningful, beneficial, and satisfying healthcare or wellness services. Similar to other clinical competencies, cultural competence requires the continuous acquisition of knowledge, refinement of skills, and assessment of self-attitudes (Hayward and Li, 2013) and encompasses more than being aware of a client's cultural background when providing nursing care (Powell, 2012).

One or more courses address cultural competence concepts in the majority of nursing curricula (Morton-Miller, 2013). Many international studies (Allen et al., 2013; Caplan and Black, 2014) have documented that cultural competence training increases the cultural competence of nursing students. Most of these studies used a pretest and posttest design (Kretzke and Bertolo, 2013; Noble et al., 2014; Wilson et al., 2010; Chen et al., 2012; Riley et al., 2012; Powell, 2012), with only one study (Delgado et al., 2013) identified as using a one-group design with long-term follow-up and one study (Harris et al., 2013) identified as using a qualitative design. In Taiwan, only one study (Perng et al., 2007) has experimentally examined the effects of a cultural competence course for nursing students. The minimal research done on this subject constitutes a gap of nursing evidence. There is general agreement that the present curriculum design is inadequate and that devoting space to developing cultural competence across the curriculum would be a worthwhile endeavour.

Several theoretical models have been developed to describe cultural competence and its various components (Andrews and Boyle, 2008; Campinha-Bacote, 2002; Giger and Davidhizar, 2002; Leininger and McFarland, 2006; Purnell, 2012; Spector, 2004). This study adopted Leininger's Sunrise Model and the Cultural Competence Assessment Instrument-Chinese Version (CCA-CV) to measure the attitudinal and behavioral changes of baccalaureate nursing students who were enrolled in a cultural competence course.

Purpose

This study evaluated the effectiveness of an educational intervention on the cultural competence of nursing students.

Methods

Design

A quasi-experimental, longitudinal research design was used.

Subjects and Setting

Subjects were recruited from two universities that are located in major urban, multicultural areas within approximately 1 hour's drive of each other. All subjects held an Associate's Degree from a 5-year junior college nursing program and were currently enrolled in a 2-year BSN program that had a total regular enrollment of 200 to 280 students per year. Students were recruited if they selected the cultural competence course and provided informed consent to participate in the study. Once enrolled in the study, subjects were assigned by the university to either the experiment group or the control group.

Instruments

Cultural Competence Assessment Instrument-Chinese Version

The CCA is based on the cultural competence model of Schim and Miller (Schim et al., 2003), and includes 25 items and two subscales: cultural awareness and sensitivity (CAS) and cultural competence behavior (CCB).

The 11 CAS items are rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The 14 CCB items are rated from 1 (*never*) to 7 (*always*). The items for each of the two subscales are summed and then divided by the number of items answered in order to obtain the subscale mean scores. Higher CAS scores indicate greater cultural awareness and sensitivity, while higher CCB scores indicate more culturally competent behavior. The two subscale scores were summed and divided by 25 to obtain the total CCA score, with scores correlated positively with degree of cultural competence. The instrument took approximately 15–20 min to complete. Two native-speaking Chinese translators translated the CCA into Chinese (CCA-CV), after which the CCA and CCA-CV were compared. A bilingual teacher back-translated the revised Chinese version. Two cultural experts then reviewed and suggested revisions to clarify the misunderstandings. In the present study, the Cronbach's alpha values for the CAS and subscale values for the CCB were .75 and .94, respectively, with a total value of .89 for the CCA-CV.

The instrument was subjected to confirmatory factor analysis, using principal components analysis without rotation. For Factor 1, CAS, explained 32.96% of the total variance and for Factor 2, CCB, explained 16.04% of the total variance. The two factors accounted for 48.99% of the total variance in the scores for cultural competence.

Intervention: Cultural Competence Course

The cultural competence course was designed by the authors based on the content and structure of cultural competence-related programs (AACN, 2008, 2009; AAMC, 2005). This course delivered 2 h of instruction each week to the experiment group for 18 weeks, and evaluated a facilitated enrichment of cultural competence earning experience at the introductory level. The 2-credit course included 26 h class lecturing of four domains, 8 h for students' project presentation, and 2 h for final examination (Table 1). The first domain (five classes) provided a basic introduction to the concepts and framework of cultural competence, clarified related definitions, and identified current personal beliefs, values, and experiences. The second domain (four classes) focused on the importance of cultural background. The third domain (one class) focused on decision-making and cultural issues. The last domain (three classes) developed clinical practice skills related to assessing and communicating on cultural competence health assessment which included cultural competence training for biological variation among the dominant ethnicities in Taiwan such as Vietnamese, Indigenous Taiwanese, and Indonesians.

During the class, the strategies included:

(1) Formal lecture with Q&A section: This section covered the topics of culture definition, cultural competency, demographics, and cultural resources; emphasized the significance of cultural