Title Page

Title	Embracing diversity and transcultural society through community health practicum among College Nursing Students
Word Count	3288
1st Author	Chang, Luna
Degree	University of Texas at Houston, School of Public Health, Dr.P.H.
Institute	National Tainan Junior College of Nursing, Department of Nursing
Position	Assistant Professor
Address	#78, Sec.2, Min-Zu Rd., Tainan (70043), Taiwan
Phone(O)	+886-6-2113125
Phone(C)	+886-989063991
FAX	+886-6-2285790
e-mail	cluna@ntin.edu.tw
2 nd Author	Chen, Shu-Chuan
Degree	Kaohsiung Medical University Department of Nursing, MSN PhD Candidate School of Nursing and Midwifery, Griffith University
Institute	National Tainan Junior College of Nursing, Department of Nursing
Position	Lecturer
Address	#78, Sec.2, Min-Zu Rd., Tainan (70043), Taiwan
Phone(O)	+886-6-2110600 ext.707
FAX	+886-6-2285790
e-mail	wisechuan@gmail.com
3 rd Author	Hung, Shu-Ling
Degree	Saint Louis University, School of Nursing, Ph.D.
Institute	National Tainan Junior College of Nursing, Department of Nursing
Position	Assistant Professor
Address	#78, Sec.2, Min-Zu Rd., Tainan (70043), Taiwan
Phone(O)	+886-6-2110600 ext.265
FAX	+886-6-2285790
e-mail	yu202677@gmail.com

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ABSTRACT

Based on 2015 annual report of foreign spouse populations were above 507,266 people in Taiwan. Most of them (68%) came from Mainland China, 29% from south-east Asia. 92% of foreign spouses were female (2015). Therefore, a challenge arises for nursing students to provide care to clients with multiple cultural variations in Taiwan. The study objectives were to explore the related factors of cultural care competence and estimate the effects of a short-term reinforced cultural course. The study used a quasi-experimental design. All participants were investigated to measure that changed in cultural competence before and after the community practice period. Of 95 participants, 46 experimental group students engaged with 3 times workshops. The study was conducted from May to August in 2015 at Southern Taiwan. The study results showed a significantly improvement of transcultural nursing competence from comparing control group with experimental group by ANCOVA analysis ($p<.05$). The study approved that the cultural workshop along with the community health nursing practice curriculum might develop students' transcultural nursing competence. In the future, in order to providing cultural sensitively care, a sustained transcultural curriculum should be advocated at Nursing schools in Taiwan.

Keywords: Education, Community health nursing, Transcultural nursing, Cultural competency

Background

A 2015 report by the National Immigration Agency indicated that 507,266 foreign spouses were living in Taiwan. Most of them (68%) came from mainland China, with the second largest group, 29%, from Southeast Asia countries including Vietnam, Indonesia, Philippine, Cambodia and son on. Of these foreign spouses, 92% were female (National Immigration Agency, 2015). It is a challenge for healthcare providers to provide culturally congruent healthcare to patients that speak different languages, have different traditions and values than they do (Waite and Calamaro, 2010). Taiwan previous studies show that nursing staffs could not delivery health care appropriately if they did not prepare sufficiently cultural sensitivity and care capability (Wang and Yang, 2002; Lee et al., 2004; Lu and Li., 2009).

Researches into transcultural nursing curriculum of Junior College Nursing School in Taiwan were limited. Chou and Chen (2011) claimed that the transcultural cognitive curriculums of Junior Nursing College should be increased in order to advance health services for diverted ethnicities and new immigration women. Thus, our study purposes was to explore the related demographics factors of cultural competence; further, to evaluate the impacts of a cultural care empowerment course for community nursing practice.

Cultural Care Concept

The concept of transcultural nursing was identified in 1950 (Leininger, 1991). Leininger claimed that nurses should develop knowledge on and the ability of culturally competent care.

Leininger provided the Sunrise Model to indicate that “cultural care values, beliefs, and behaviors were influenced by and tend to be embedded in the worldview, language, religious (or spiritual), kinship (social), political (or legal), and educational, economic, technological, ethno historical, and environmental contexts of a particular culture” (Leininger, 2006).

Jirwe et al. (2009) investigated the concept of cultural competence and claimed that its core components were “an awareness of diversity among humans, ability to care for people, a nonjudgmental openness for all people, and the enhancement of cultural competence as a long-term continuous process”. Other researchers suggested that the attributes of cultural competence include cultural awareness, cultural knowledge, cultural skills, cultural understanding, cultural sensitivity, cultural interaction, and cultural proficiency (Burchum, 2002; Camphinha-Bacote, 2002).

Educational Strategies for Transcultural Competence Development

In order to increase nursing students’ cultural knowledge, and cultural sensitivity on cultural health care, many researchers, Lee and Allen, tried to design different models of curricula (Lee et al., 2006; Allen et al., 2013). In additions, some studies also provided systematic Guidelines and comprehensive instructions on conducting a cultural competence development program. The primary teaching strategies applied into classes were group discussion on multicultural issues and practice case scenarios to increase experiences on interaction and communication with multicultural clients. (Abdullah, 1995; Douglas et al.,

2014)

Further, Ozkara San (2015) conducted a literature review to identify the best practice in the utilization of simulation to enhance culturally competent nursing care. That study revealed that the use of simulation can support culturally competent care by providing a safe environment for conducting cultural assessment, eliciting students' attitudes toward cross-cultural situations, and improving communication, critical thinking, and nursing skills.

The Impact of Cultural Care

Servonsky and Gibbons (2005) reported that a nurse caring for patients with consideration for their languages and traditions and simultaneously respecting his or her own cultural beliefs and behaviors increases the patients' satisfaction with the quality of care received, yielding benefits. Providing patients with culturally appropriate nursing practices may enable patients to follow the health instruction effectively, improve their subsequent health behaviors, and result in the patient receiving sustained quality of care (Quist and Law, 2006).

Therefore, the Transcultural Nursing Competence (TNC) was imperative to understand the diversity of healthcare demand within multicultural populations and communities. TNC entailed providing nursing services in culturally appropriate and culturally sensitive situations in which health problems arise.

Method

Participants

The present study was a quasi-experimental design. The participants were recruited from the fourth grade students in one Junior Nursing College at Southern Taiwan. Study participants participated voluntarily in the surveys, of 46 persons engaging in the intervention group and 49 persons in the control one. They mostly were female students aged 18 to 20.

Instruments

The measurement instrument called as the Nurse Cultural Competence (NCC) scale in Chinese version was developed by Perng et al., 2007. The research team received a permit from Professor Perng to use the measurement instrument of NCC scale. However, the questionnaire was developed for nursing staffs' estimate, thus, the questionnaire content was modified to apply to college students. The questionnaire items were then subjected to exploratory factor analysis to integrate them into five subcategories of transcultural belief, transcultural knowledge, transcultural ethics, transcultural awareness, and transcultural skill. The reliability according to Cronbach's alpha was .78–.94, and the average variance was .50–.79. The NCC Scale comprises 41 items that were ranked on Likert scale ranging from 1 to 5 points (Strongly Disagree, Disagree, Undecided, Agree, Strongly Agree).

In addition, the questionnaire includes NCC scales, questions concerning basic demographic information and a critical thinking sheet. The requested basic demographic information included age, grade, foreign language proficiency, practice with cultural care and

life experiences.

Procedure

A statement was provided to inform participants of their right to decline their participation without experiencing any academic consequences. All participants had to complete a consent form before they conducted the study survey and engaged on the workshop activities.

The experimental group students engaged in three-times workshops on multicultural health issues and case management of foreign spouses. The TNC workshops were comprised 10-hour interaction lectures. The contents of the workshop program include (a) increasing cultural awareness on multiple cultural environments; (b) practicing communication skills with foreign spouses; (c) recognize case management strategy for foreign spouses; (d) delivering community healthcare for newly immigrated families or indigenous Taiwanese; and (e) personal reflection on transcultural care experiences through a panel discussion.

Data Analysis

The study results were analyzed using SPSS ® (17.0). The descriptive statistics and analysis of statistics were both used to explore the demographic data. The paired t-test statistic method was used to estimate the differences of competence status before and after the study period among students. In addition, we used ANCOVA to compare the study participants' competence capabilities between two groups. Finally, using a linear regression

model to analyze the demographic and relative factors contributed to nursing students' cultural competence.

Study Result

Demographic Characteristics

As shown in Table 1, the participants ranged in age from 18 to 20 years, and 96% were female. The participants' parents were mostly Taiwanese (93%), Hakka (5%–6%), or aboriginal (3%). Three participants' mothers came from other countries. The frequencies of students' transcultural care experiences with new immigrant couples or aborigine patients are shown in Table 1, which indicates that community nursing provided the most opportunities to practice transcultural caring. Regarding self-perceived difficulty in English communication, 19% of the participants reported difficulty listening, 29% reported difficulty verbalizing, and 16% reported difficulty reading. Of the participants, 33% reported having overseas travel experience, 7% reported studying abroad for a short-term period, and 98% reported doing so with a commitment to nursing. Only one demographic variable, age, significantly differed (chi-square = 6, $p < .05$) between the control and experimental groups, because the experimental participants received the study survey after the control group participants did.

Transcultural Nursing Competence Development

We used t test analysis to compare the mean values of cultural competence among participants. The results indicated that effectiveness in three categories, transcultural knowledge, transcultural awareness, and transcultural nursing skill, increased significantly ($p < .05$) in the control group ($N = 58$). Further, the experiment group ($N = 46$) showed more improvement in all five categories except transcultural belief.

Regarding the period prior to curriculum implementation, the control group participants had significantly greater competence in transcultural knowledge and nursing skills than the experimental group participants did. However, using ANCOVA analysis to compare the two groups for the period after curriculum implementation revealed that the experimental group showed a more significant improvement in the five categories of cultural competence than the control group did as Table 2.

It meant that the cultural workshop along with community health nursing practice curricula might improve students' competence. However, the mean values of transcultural knowledge, awareness and nursing skills were still below 3 points no matter before or after the workshop. It pointed out some students could not perform health service with cultural sensitivity consistently.

Factors Related to Transcultural Nursing Competence

A multiple stepwise regression model was first used to analyze the relative factors of TNC. The analyzed variables included population characteristics, language capability, and practice experiences concerning foreign spouses' care. The analysis results, reported in Table 3, indicated that **transcultural awareness** was significantly affected by factors such as transcultural belief, transcultural ethics, transcultural nursing skills, community health practice, and overseas traveling experiences ($R^2 = 0.557$, $p < .001$). The participants exhibited lower confidence in TNC concerning cultural care during vaccine injections, Denver Development Screen Test (DDST) exam services, or engaging in overseas travel.

Additional results as Table 4 indicated that factors that significantly affected **transcultural nursing skills** were transcultural knowledge, awareness, and self-perceived

English reading proficiency ($R^2 = 0.503$, $p < .001$).

Reflections of Participants

The major benefit expressed by the experimental group participants was that they learn transcultural knowledge and skills based on the workshop. Through interaction with two invited speakers, one woman had been working as a nurse aide for 10 years, and another had recently married and moved to Taiwan, the participants were able to understand the migrant women's health demands from the adaption experiences of cross country.

The participants also mentioned that the curriculum reinforced them through cultural film watching, interaction with immigrants, learning case management lectures, and engaged in community health nursing practice. Without these learning opportunities, the junior college students might did not have achieved a higher TNC level.

Discussion

Cultural Curriculum Development

The study's curriculum comprised 10-hour lectures, 4 weeks of community practice mentoring by nurse instructors, and a panel discussion on the participants' personal reflections on their cultural care experience. In the practicum setting, the study participants were encouraged to conduct home visits for case management of new immigrant couples, not only administer clinical vaccines or DDST children exam services. Based on the references of Abdullah (1995) and Douglas et al. (2014), this study project was consisted of

objectives included enhancing participant multicultural knowledge, integrating concepts such as cultural awareness and ethics into the program, arranging for the participants to practice their cultural care skills with community populations, and developing communicative capabilities according to foreign spouses' cultural background.

The core value and objectives were critical for designing all aspects of a comprehensive cultural curriculum, including the length of the curriculum and time constraints. This curriculum was different from the curricula of Chao (2012), Perng (2012), and Allen (2013), which had over 32 hours of lectures and were implemented over a full semester, enabling substantial discussion on cultural issues. However, the final study results still indicated substantial impacts on the development of cultural competence through an education program involving field practice.

Cultural Curriculum Revolution

Although the TNC workshops combined with a four-week community health nursing practice curriculum was different from the curricula of Tsao (2012), Perng and Watson (2012), and Allen et al. (2013), which were implemented over a full semester, and enabling substantial discussion on campus. The reformed workshop program still empowered Junior College students' cultural competence involving field practice.

A previous study (Easterby et al., 2012) indicated that an overseas field visit might help educators gain insight into cultural differences and the impact of culture on medical care and

health service. In the study, two faculties held the workshops also provided a culturally immersive experience to the study participants, since they had been instructed students to conduct oversea nursing practice (Chang et al., 2013).

During the intervention curriculum, the study participants learned how to use appropriate language and instruments to communicate with foreign spouses and develop partnership at community area. Then, collecting foreign spouses' information regarding their cultural values, religions, and lifestyle, and use this information to provide sensitive nursing care. In most cases, students can follow instructions to estimate the household environment of foreign spouses and use the evaluation form of the DDST to evaluate the developmental status of their children. These cultural lectures closed the gaps of students from cultural theory to nursing care practice. The study participants may integrate their transcultural concepts into their cultural care capabilities.

Multiple Factors Related to Transcultural Nursing Competence

At first, this study pointed out some demographic factors and four core capabilities related to transcultural awareness. These factors were consistent with the cultural competence model developed by Campinha-Bacote in 2002. Chang et al. (2013) identified another two factors related to transcultural nursing competence: working with multicultural resources and keep friendships from different countries. However, these two factors were not determined as a variable influencing Junior College nursing students' TNC. Students were not familiar with

multicultural resources and did not have enough opportunities to make friends from other countries in one Junior College school.

Self-Efficacy on Cultural Care

Some researches revealed that students' TNC on self-efficacy might be advanced from receiving lectures with interaction learning process (Allen, 2010; Lim et al., 2004). Although, in this present study, we did not apply a scale for measuring the self-efficacy of our participants, we used a critical thinking sheet to enable students to express their experienced benefits and suggestions. Most students reported that the study program facilitated improving their confidence in caring for foreign spouses. Through the workshop program, the participants learned how to be aware of the health demands of different countries and how to deliver health services to foreign spouses respectively.

Limitations

The study used convenient sampling method that limited the generalizability of the results. The funding for the study limited the length of the workshop program and the numbers of students invited to participate.

Conclusions and Implications

The TNC were significantly increasing from the community nursing practices along with the cultural care workshops. To develop the TNC of nursing students should be educated in essential transcultural knowledge, awareness, and nursing skills. Furthermore, language

proficiency in English might help students to recognize the multiple cultural in a globalized society. We recommend that nursing professors address transcultural nursing concepts at the foundation of college nursing curricula.

Some nations still struggle with cultural, racial, ethical, and religious conflicts. Social, demographic, and cultural diversity cause salient changes in the delivery of healthcare. The TNC is imperative for providing the often complex healthcare needs of patients, their families, and communities. The TNC entails providing nursing services in culturally appropriate and culturally sensitive situations in which health problems arise.

Ethical Approval

The study was approved by the Institutional Review Board at An-Tai Hospital (#15-005-B1).

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Tables

Table1

Demographic Characteristics

	Con. ^a (n=49)	Ex. ^b (n=46)	N=95
	n (%)	n (%)	
Age			
18	11(23%)	2 (4%)	13(14%)
19	36(75%)	42(91%)	78(83%)
20	2 (2%)	2 (4%)	4 (3%)
Gender			
Female	47(96%)	45(98%)	92(97%)
Male	2 (4%)	1 (2%)	3(3%)
Father ethnicity			
Aborigines	2 (4%)	1 (2%)	3 (3%)
Taiwanese	43(88%)	43(93%)	86(91%)
Hakka	4 (8%)	2 (4%)	6(6%)
Mother ethnicity			
Aborigines	1 (2%)	2 (4%)	3(3%)

Taiwanese	42(86%)	42(91%)	84(89%)
Hakka	4 (8%)	1 (2%)	5(5%)
China	1 (2%)	1 (2%)	2(2%)
Other	1 (2%)	0 (0%)	1(1%)
Cultural Care experience			
1.Medicine	9(18%)	4(9%)	13(14%)
2.Surgical	7(14%)	3(7%)	10(11%)
3.Community Health	6(12%)	16(35%)	22(23%)
4.Maternal Child	4(8%)	5(11%)	9(9%)
5.Pediatrics	4(8%)	3(7%)	7(7%)
6.Mental Health	1(2%)	0(0%)	1(1%)
English reading proficiency	42(86%)	37(80%)	79(83%)
English verbal proficiency	39(80%)	30(65%)	69(72%)
Foreign friendship	17(35%)	11(24%)	28(29%)
Oversea travel	20(41%)	13(28%)	33(35%)

^a Con. means control group.

^b Ex. Means experiment group

Table 2

The post-test comparison between control and experimental groups by ANCOVA.

	Con. ^a (n=49)	Ex. ^b (n=46)	F-ratio	<i>p</i>
	M±SD	M±SD		
Cultural Belief	3.28±0.57	3.43±0.46	49.07	<0.001
Cultural Knowledge	2.65±0.54	2.64±0.58	30.24	<0.001
Cultural Ethic	3.26±0.53	3.42±0.57	22.11	<0.001
Cultural Awareness	2.78±0.61	2.86±0.55	28.59	<0.001
Cultural Nursing Skills	2.86±0.47	2.64±0.76	24.04	<0.001

^a Con. means control group.

^b Ex. Means experiment group

Table 3

Multiple stepwise regression analysis of participant transcultural awareness (N= 95).

Variable	Coefficient	Std Error	<i>p</i>	R ²
Community practice	0.227	0.095	0.018*	0.557
Vaccination care	-0.227	0.114	0.048*	
Child development screen test	-0.238	0.112	0.036*	
Travel overseas	-0.236	0.088	0.008**	
Skill	0.336	0.070	0.001***	
Belief	0.215	0.087	0.016*	
Ethics	0.366	0.081	0.001***	

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Table 4

Multiple stepwise regression analysis of participant transcultural nursing skills (N=95).

Variable	Coefficient	Std Error	<i>p</i>	R ²
Self-perceived Eng. Reading proficiency	0.311	0.126	0.020*	0.503
Transcultural knowledge	0.538	0.090	0.001***	
Transcultural awareness	0.312	0.087	0.003**	

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Research Highlights

- Community health nursing practices and transcultural nursing care curriculums are key approaches for cultivating the transcultural nursing competency.
- To develop the transcultural nursing competency, nursing students must be educated in essential transcultural knowledge, attitudes, and skills.
- The transcultural nursing competency should be constantly addressed on nursing education for providing clients with a culturally sensitive care in a globalized society.

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Luna Chang, Shu-Chuan Chen, Shu-Ling Hung

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