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Examining the implementation of teaching and learning interactions of transition cultural competence through a qualitative study of Taiwan mentors untaking the postgraduate nursing program

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ABSTRACT

Background: Cultural competency has been identified as an essential curricular element in undergraduate and graduate nursing programmes. Supporting successful transition to practice is essential for retaining graduate nurses in the workforce and meeting the demand for cultural diversity in health care services.
Objectives: This study aimed to explore the teaching and learning interactions of transition cultural competence from the perspective of mentors of newly graduated nurses in a Taiwanese postgraduate nursing programme.
Design: A qualitative design that utilised focus group interviews was adopted for this study. A framework approach—a content and thematic analysis strategy—was used to analyse the interviews.
Setting: The study setting consisted of two hospitals in northern Taiwan.
Participants: The study participants consisted of 24 new graduate nurse mentors.
Methods: Three focus group sessions were conducted (two at a medical centre and one at a district hospital), where the participants were interviewed.
Results: Four themes were derived from the data—transition process, teaching strategies according to the transition stage, learning after overcoming clinical stress, and awareness of cultural diversity among new graduate nurses. The clinical routine and physical stress of caring for patients did not allow the newly graduated nurses to appropriately demonstrate cultural competence in the first three months. Mentors were only able to provide resources for new graduate nurses when they first started to care for patients in cultural groups. The point of catalysis was when learners finally gained awareness of cultural differences, and, consequently, they could encounter the teaching and learning process.
Conclusion: The different learning stages and teaching strategies illustrated the interactive process between new nurses and educators. Facilitating the cultural awareness of learners is a challenge for teachers who provide cultural competence training. This model could serve as a reference for curriculum and clinical training programmes.

1. Introduction

Cultural competence has become increasingly important due to a growing awareness of the needs of minority groups worldwide as well as increasing cultural diversity in Taiwan. Although the rapidly changing economic and social scenarios have reduced poverty, lessened cultural difficulties, and bridged the differences between living standards, language barriers might contribute to health and health care

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Table 1
Interview items.

Interview questions	Reference
I Cultural competence of mentors	Cai et al. (2017); Young and Guo (2016); Smith (2018)
1. What is the meaning of cultural competence?	
2. How does cultural competence influence health care?	
3. How should conflicts between clients and health care be dealt with?	
II Cultural competence in PGY program	
1. How do you teach new staff to provide cultural competency care?	Smith (2018)
2. Are new staff aware of cultural differences of patients in their care? Why or why not?	
3. When do NGNs become aware of clients' cultural difference or variabilities?	
4. How can NGNs be helped to resolve conflicts between clients and health care?	
5. How can we teach NGNs to provide cultural competency care?	

disparities for disadvantaged groups (Mobula et al., 2015). Thus, cultural competence could enable nurses to transform interventions into positive health outcomes, such as increased patient trust and satisfaction (Tang et al., 2018), the perception of receiving quality health care, and better adherence to treatments (Henderson et al., 2018). A culturally competent nurse is more likely to demonstrate effective interaction and communication skills while providing quality care (Govere and Govere, 2016). Although cultural competence is essential for ensuring positive health care outcomes, a lack of conceptual clarity in the definition of cultural competence has resulted in lower quality and less effective health care provision for culturally diverse people (O'Connell et al., 2007).

2. Background

Cultural competence results from the synthesis of four distinct constructs—cultural knowledge, awareness, attitudes, and skills—among which cultural awareness is the first step towards building cultural competence (Bhalla et al., 2016). Increasingly, studies of cultural awareness training for nurse practitioners (Elminowski, 2015), students (Cantey et al., 2017), faculty, and residents (Bhalla et al., 2016) reveal that awareness of cultural diversity is the minimum level of cultural competence. Thus, organising cultural awareness activities is an important strategy to promote cultural competence among nurses (Douglas et al., 2014).

Taiwan's medical teachers face barriers in terms of cultural competence because of a lack of awareness and self-reflection, especially with regard to cultural diversity among members of the general public and medical professionals in particular (Lu et al., 2014). One of the key issues in the development of cultural competence is that it lacks a concordant definition in the concept of culture. Furthermore, cultural insensitivity and lack of awareness among medical professionals makes it difficult for them to understand diseases from individual and cultural perspectives and, consequently, provide appropriate health care services (Kleinman and Benson, 2006). Cultural competency has been identified as an essential core curricular element in undergraduate and graduate nursing programmes (Calvillo et al., 2008), and nursing educators in Taiwan have also begun to integrate cultural competency in the nursing curriculum (Lin et al., 2015).

Transition to practice is a stressful period for new graduate nurses (NGNs). Thus, nurse residency programmes are widely implemented to enhance the integration of NGNs who are entering the workforce. In Taiwan, NGNs attend a postgraduate year programme (PGY) and receive standardised professional training under the mentorship of clinical preceptors, which equips them with work attitudes and skills to provide patient-centred and holistic care in a clinical setting. The first three months of training consist of one-on-one clinical supervision, which aids their understanding of the roles, responsibilities, duties, norms, departmental characteristics, and scheduling principles of nursing work, infection control principles, common diseases, and examinations handled by the department. This training develops and enhances the nurses' ability to care for patients independently. Following the completion of training, which can range from three months to one year, in addition to the aforementioned skills, equipment use, and handling of clinicians' instructions, nurses must develop competence in the application of nursing processes, execution of nursing duties, and satisfaction of the physical, psychological, spiritual, social, and cultural needs of patients (Ministry of Health and Welfare, 2015).

Previous research studies on NGNs were primarily focused on job retention and satisfaction, with few studies analysing the process by which NGNs cope with the transition to professional practice from a learning perspective. Utilising the perspective of the NGN clinical supervision process, the present study investigated the teaching and learning processes that lead to the development of cultural competence among new nurses with less than two years of nursing experience. The study aimed to examine the process by which cultural competence education provided in school transforms into the ability to provide culturally sensitive nursing care and thus provide a reference for the continuation of such education practices.

3. Methods

3.1. Design, setting, and sample

The study adopted an explorative qualitative approach. The outline for an interview regarding the teaching of cultural competence by mentors, which included questions on the mentors' cultural competency experiences and the relevant competency education provided in the PGY programme, was developed based on previous literature (Table 1). Between August and December 2017, two focus group sessions were held at a medical centre in northern Taiwan (3700 beds), and one focus group session was held at a district hospital (533 beds). A total of 24 mentors, who were all female, participated in the interview. Their demographic characteristics are detailed in Table 2.

3.2. Ethical considerations

The study was conducted with the approval of the Regional Ethical Review Board of the hospital where the researchers worked, and the principles outlined in the Declaration of Helsinki were followed. The principal investigator explained the research purpose and interview method, and participants were interviewed only after the voluntary completion of the consent form. All interviewees received a voucher worth NT$300 for their participation in the study.

3.3. Data collection

With approval from the hospital and assistance from their respective supervisors, we invited the voluntary participants to attend a focus group session, which was held in a quiet meeting room of their hospital after working hours. The focus group session was conducted by the

Table 2
Demographic data of participants ($N = 24$).

No	Title	Education	Working period (years)	Mentor period (years)	Clinical setting
1.	N2	BSN	11	NA	Intensive care unit
2.	Supervisor	MSN	12	3	Medical ward
3.	N2	BSN	10	2	Intensive care unit (ICU)
4.	N4	BSN	19	8	Cardiovascular Surgery ICU
5.	N3	BSN	6	2	Medical ward
6.	N2	BSN	8	3	Hemodialysis room
7.	N3	BSN	16	9	General ward
8.	N3	BSN	14	6	Emergence room
9.	N3	BSN	19	3	Medical ward
10.	N4	MSN	12	2	Neurological ICU
11.	N3	BSN	6	3	Surgical ICU
12.	N2	MSN	6	3	Medical ward
13.	N4	BSN	20	7	Medical ward
14.	N3	BSN	12	6	Pediatrics ward
15.	N3	BSN	8	0	Surgical ward
16.	AHN	BSN	14	10	Nephrology ward
17.	AHN	BSN	16	6	Chest ward
18.	N3	BSN	13	2	Gastroenterology ward
19.	AHN	BSN	19	14	Medical ward
20.	N3	BSN	10	1	Gynecology ward
21.	N4	BSN	14	4	Orthopedics ward
22.	N4	BSN	15	4	Neurological ward
23.	N4	BSN	19	4	Chest and heart ward
24	N4	BSN	22	4	Medical ward

principal investigator, while a research assistant took minutes and recorded the entire session on audio. Each focus group session involved 6–9 participants and lasted for about 60–90 min. All participants were given the interview outline prior to the interview so that they could express their opinions and participate in the discussion during the focus group session.

3.4. Data analysis

The study's qualitative data analysis was based on the work of Côté et al. (1993). First, data was coded by the principal investigator into 'meaning units'—discrete stand-alone ideas—before categories and subcategories were created and named by clustering meaning units together. In the validation phase, a member of the research team categorised the meaning units without any prior knowledge of the categories and subcategories developed by the principal investigator, following which the two coders met to review their output. For each question, agreement between the two coders exceeded 80%. Lastly, the categories and subcategories were finalised, and sample meaning units were selected.

4. Results

The model of teaching and learning transitional interactions consisted of four themes and fifteen subthemes, which are all presented in Table 3.

4.1. Transition process

4.1.1. A tight squeeze of cultural competence under the clinical stress

The clinical routine and physical stress involved in caring for patients were not revealed to NGNs in order to properly gauge their cultural competence in the first three months. One mentor noted:

> 'However, there are several things that new nurses need to understand, so [cultural issues] are not one of their main focus areas. In addition, the nurses are not willing to engage in or… [pay attention] to this aspect, as there are too many routine examinations to remember, and the nursing skills have to be recalled to be implemented in clinical settings.'
>
> C3-912-4

4.1.2. Gaining independent mastery in clinical settings

The interviewed mentors believed that new nurses should be able to demonstrate cultural competence one month after working independently. However, even after completing one month, new nurses may still be occupied with the acquisition of clinical and treatment-related skills. All mentors in our study mentioned that a new nurse becomes aware of cultural differences three months after working independently, as they tend to master treatment-related skills by then.

> 'NGNs who just started work may already find it difficult to cope with routine work. They may not be immediately aware that certain patients require special care procedures, and usually require at least six months to become competent in this aspect. NGNs have to be familiar with the routine of the wards and with the patients before they have time to learn other skills.'
>
> C-1016-Q15

4.1.3. Demonstrating cultural competence learned in school

After six months on the job, most new nurses who are still in the workforce master the work routine, become proficient in providing personalized care, and establish their own work mode. By this point in time, their demonstration of cultural competence is largely dependent on the cultural competence education they received in school.

> 'During the first three months, NGNs are still undergoing training and familiarising themselves with the work routine. When they are able to work independently, they will still need to take some time to learn the ropes and incorporate their own care methods, which may have been taught in school.'
>
> C-9172-Q16

4.2. Teaching strategies according to learners

Clinical mentors employ different teaching strategies to guide learning based on the experience level of new nurses.

4.2.1. Direct provision of resources

Currently, according to one mentor's responses in the focus group session, the mentors' guidance strategy for teaching NGNs to care for different cultural groups is 'providing direct instruction' or 'allowing new nurses to provide cross-cultural care resources to individual cases'. During the first three months, new nurses must learn to expedite work related to medical care; therefore, they do not have time to contemplate issues associated with cross-cultural care. As such, the direct provision of resources is the main teaching strategy adopted at this stage.

> 'NGNs may not be aware of the diagnoses of the patients and are not even familiar with the work routine. They may not even notice any problems after receiving the patient and completing their duties and have to subsequently deal with issues associated with doctors' instructions. I could only give direct instructions for him to take note of special dietary requirements or the language that patients use for communication… I could only instruct them to deal with matters immediately.'
>
> C-1017-Q22

4.2.2. Asking questions after gaining cultural awareness

When clinical mentors observe that new nurses have become aware of the cultural differences among patients, they begin to pose questions

Table 3
The teaching and learning process of cultural competence for new graduated nurses.

Themes	Subthemes	Example responses
Transition process		
	• A tight squeeze of cultural competence under the clinical stress	They encounter stress due to unfamiliarity with clinical work when just starting out and are unable to pay attention to cultural care.
	• Gaining independent mastery in clinical settings	Subsequently, they can slowly understand the condition of patients and provide personalized care such that they are considered independent.
	• Demonstrating cultural competence learned in school	In order to provide personalized care, they should be able to apply cultural care that they learned during their training.
Teaching strategies		
	• Direct provision of resources	When they encounter tremendous stress, we should directly tell them where to get help to solve patient problems relating to religion.
	• Asking questions after gaining cultural awareness	When they tell me that that patient is an indigenous Taiwanese, I will ask the nurse to evaluate the patient's cultural habits. If differences are discovered, I will ask him rhetorical questions.
	• Case discussion	Previously I met a patient from the Mediterranean region who requires a special diet. I used this case to start a discussion and let the staff search for information.
Learning activities		
	• Imitating mentor	When a nurse encounters tremendous stress, he/she will mimic senior nurses' behavior.
	• Asking Questions	When he/she cares for patients independently, he/she will ask questions.
	• Action after reflection	After I asked a question, the nurse will think it through and explain to the patient how to solve dietary problems.
Cultural awareness		
	• Language	Usually, I will know the ethnicity of a patient from his/her speech.
	• Stereotypes of specific cultural groups	When I hear a patient speaking Taiwanese Hokkien in Tainan, I will associate that person with rural areas and feel that the patient is ignorant.
	• Differences in diet	Sometimes, I can determine patient ethnicity from what they eat and his/her unique culture.
	• Religious activities	
	• Alternative medicine	Some patients will drink holy water and use talismans. Some patients will eat special ashes.
	• Ethnicity-related diseases for Austronesian clients	Sometimes when the junior nurses see Austronesian clients consume alcohol, they will think of whether to provide health education on liver cancer

to them, such that the nurses can contemplate the differences between what they learned in school and the clinical setting, identify available resources through further thinking, and correct their actions accordingly.

> 'This strategy is not feasible in the first three months, as the NGNs are not aware of the differences. They do not know or are unable to deduce the reasons that cause individual patients to be uncomfortable, such as restrictions or an unfamiliar lifestyle, as they cannot differentiate between patients. When they become aware of the differences, we will pose questions to them, and they will try to seek the answers.'
>
> C-9162-Q16

4.2.3. Case discussion

After nine months, most new nurses who are still in the workforce are very comfortable with their work routines and are capable of providing appropriate care. Through communication and discussion of special cases, mentors begin to assist new nurses in enhancing their sensitivity during cross-cultural care situations. At this point in time, most new nurses are able to demonstrate existing cultural competence; moreover, continuous stimulation through case study discussions enhances their critical thinking and cultural awareness.

> 'When NGNs become aware that different patients have different needs, they start to ask questions, e.g. whether the diet of patients from China should be re-evaluated if those patients exhibit poor appetite. When we observe that the nurses did not notice issues regarding post-discharge follow-up in aboriginal patients, we discuss these specific cases with them.'
>
> C1026-Q5

4.3. Effect of teacher-student interactions on awareness

The teaching and learning processes of cultural competence training for NGNs are illustrated in Fig. 1. Learners' acquisition of awareness of cultural differences is an important stage that can catalyse the teaching and learning process. Through our focus group sessions, we found that learning can only be induced when cultural awareness has been developed. The cultural differences mentioned by mentors include skin colour, language, ethnicity, dietary and religious activities, and nationality. When the mentors realise that cultural differences exist between patients and that individualised care must be administered, they begin to guide the NGNs in harnessing their skills in cross-cultural care depending on their progress and stage of learning. New nurses must have the capability to endure the stress experienced in a clinical setting and independently care for individual patients in order to practice the cultural competence education received in school. The learning processes of the new nurses vary based on their ability to handle situations related to clinical care and treatment. Moreover, the duration required for the development of cultural awareness and sensitivity differs among nurses and can also affect the learning process. The sensitivity of clinical mentors towards different cultural groups and discussions on special cases are pivotal in the continuous development of competence in cross-cultural care.

4.4. The ambiguous definition of cultural diversity

The key to cultural competence education lies with the definition of culture as learned by teachers and students. More importantly, for NGNs and their mentors, the definition of cultural diversity awareness forms the basis of providing culturally competent care. Table 3 presents the awareness of cultural diversity listed by 24 mentors, which includes language, stereotypes of specific cultural groups, differences in diet, alternative medicine, religious habits, and ethnicity-related diseases for Austronesian clients. The mentors' varied understandings and awareness of cultural diversity, in terms of depth and breadth, influenced the need for cultural awareness and competence, thus varying the teaching strategies for new nurses.

4.5. Learning motivation of new nurses

The learning patterns of NGNs varied at different learning stages according to the mentors. NGNs, who have just joined the unfamiliar

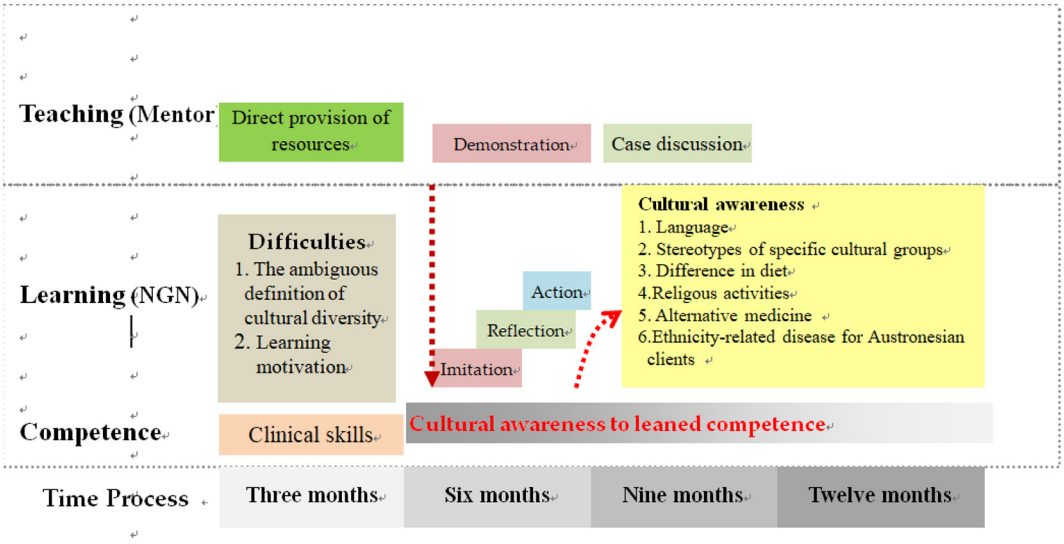

Fig. 1. The teaching and learning interactions of transition cultural competence.

workforce, need to handle the stress of clinical treatment on their own. Thus, they are unable to adequately become culturally competent and can only learn by observation and imitation. Once NGNs gain proficiency in providing clinical care independently, they develop cultural awareness and are able to provide culturally appropriate care; NGNs can acquire cultural competence in the clinical setting by asking questions and participating in discussions with the mentor. The duration of the learning process and the point at which cultural competence is demonstrated are influenced by the NGN's motivation to learn and the education received in school.

> 'Every new nurse learns differently. Some learn very fast and can work independently; they understand the specific issues of each patient and demonstrate cultural competence in interactions with patients after one month of training. Others are very slow at learning, or have poor motivation, as they believe that cultural competence is not necessary; therefore, in the beginning, they tend to not observe the cultural competence demonstrated by the senior nurse.'
>
> C-1030-Q11

5. Discussion

All NGNs experienced an important transition from school education to clinical practice and therefore experienced work stress in the first 3–6 months of nursing practice (Kang et al., 2016). Few studies have detailed timeframes for NGNs' transition to practice experiences, especially as they relate to cultural competence. In line with the research of Aggar et al. (2017), we find the similar key time points for transition of cultural competence that graduate nurses to be competent begin in the sixth month and be stable in the ninth month the first year of clinical practice.

In the Taiwanese context, the implementation of cultural competence in medical education has been a mindset unique to medical educators and learners, and the development of cultural competence has not yet been considered a high priority (Tsai et al., 2008). Moreover, during the first three months, the increasing job responsibilities, heavy workload, fear of making errors, and handling of unexpected patient care situations (Rhéaume et al., 2011) result in the neglect of culture-related issues in the workplace for NGNs. If NGNs can endure the stressful initial three-month period and subsequently master patient care abilities, their confidence can be improved (Innes and Calleja, 2018; Kang et al., 2016). These findings support the delay in cultural diversity awareness accompanied by the NGNs' stress in our findings. NGNs who mastered clinical care abilities and were no longer restricted by stress became aware of cultural differences between patients and were able to demonstrate cultural competence.

Research on educational training for new nurses has rarely focused on the teaching and learning strategies employed during the transition process. The learning process is complex, especially during the period of an NGN's adaptation to the new nurse residency programme and mentor-NGN interactions. Studies have indicated that the provision of strategies, support, and resources to new nurses based on their degree of adaptation is the most important requirement during the transition period in the first year of practice (Zamanzadeh et al., 2014). The active teaching strategies such as the web-based or CD-ROM program that provide useful resources was designed to aid the transition from student to newly qualified health professional through supporting learning in everyday practice (Roxburgh et al., 2010). Moreover, mentors serve as an agency to provide resources, support, role models, and change (Innes and Calleja, 2018). The immediate provision of resources to alleviate the stress that new nurses face when having to make immediate responses to clinical situations within a short time frame is an important supportive strategy (Smith, 2018). Some of the teaching strategies explored in our study have also been demonstrated as having effects on nursing students' cultural competence training in previous studies, such as case discussion after viewing videos of cultural clients (Olson et al., 2016) and interviews with students to reflect on learning cross-cultural skills (Liu et al., 2018). Since NGNs could recall cultural competence knowledge learned at school, mentors could adopt these teaching strategies to enhance their cultural competence skills.

This study supports the theory that cultural competence is learned over time and is a process of inner reflection and awareness (Young and Guo, 2016). Most studies do not outline the learning processes involved in cultural competence education, but Constantinou et al. (2017) proposed a pyramid model for building cultural competence into medical curricula, whereby medical students can enhance their skills through acquiring, applying, and activating knowledge. The preliminary stage involves assistance in knowledge acquisition; however, the accumulation of work experience is necessary for appropriate application of the acquired knowledge.

This study found that the effect of teacher-student interaction on cultural awareness activities is important in the transition stage to rebuild cultural competence for NGNs. Previous studies support the importance of mentors, whose perspectives regarding cultural competence reflected the differences in their definitions of culture diversity (Lu

et al., 2014). Prior studies have also demonstrated that most mentors considered recognising the existence of different cultures as the starting point for facilitating thinking about cultural competence, both for themselves and their students (Smith, 2018). It is worth mentioning that cultural awareness in Mainland China focuses on the recognition of culture because the term 'culture' itself seems to be too abstract for Chinese nurses (Cai et al., 2017). In addition, the Han people are culturally dominant, and other ethnic groups are expected to assimilate (Bayar, 2014). Knowledge of these similarities and differences will allow nurses to be more sensitive to clients from a culture different than their own. NGNs need to be aware of these types of factors during their transition to the clinical setting in order to learn cultural competence in Taiwan (Chen and Huang, 2018). The findings of the present study revealed that understanding of cultural differences still varies among mentors; therefore, future research should focus on enhancing the cultural competence of clinical preceptors.

6. Conclusion and recommendations

Research focusing on the transition of new graduate and novice nurses into critical care areas is lacking; however, the research that is available strongly supports the use of transition programmes for developing confidence and competence in NGNs. This study examines transitions in learning, competence, and teaching strategies to demonstrate a learning and teaching model for the cultural competence training of new nurses. This model can provide a reference for curriculum and clinical training programmes, as it outlines the transition process of learning cultural competence, which is experienced by NGNs as they transform from students into new nurses, as well as the teacher-student interactions during the mentoring process. In addition, the study can provide a reference for on-the-job training to enhance lifelong cultural competence learning.

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Contributions

Chang Li-Chun designed the study and interview procedure. Lin Hue Ling and Ching Wen Chiu collected and analyzed the data. Chang Li Chun, Chih-Ming Hsu, and Li Ling Liao wrote and revised the manuscript. All authors critically revised and approved the final manuscript.

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Ethics statement

The study was conducted with the approval of the Regional Ethical Review Board of Taoyuan Gang Gung Memory Hospital (no: 201700220B0).

References

Aggar, C., Bloomfield, J., Thomas, T.H., Gordon, C.J., 2017. Australia's first transition to professional practice in primary care programme for graduate registered nurses: a pilot study. BMC Nurs. 16 (14). https://doi.org/10.1186/s12912-017-0207-5.

Bayar, N., 2014. A discourse of civilization/culture and nation/ethnicity from the perspective of inner Mongolia, China. Asian Ethnicity 15 (4), 439–457. https://doi.org/10.1080/14631369.2014.939329.

Bhalla, M., Dominguez-Diaz, D., Brown, R., Homayounrooz, F., 2016. Culturosity: fostering cultural awareness among faculty and residents in a community teaching hospital. Conn. Med. 80 (10), 585–588.

Cai, D., Kunaviktikul, W., Klunklin, A., Sripusanapan, A., Avant, P.K., 2017. Identifying the essential components of cultural competence in a Chinese nursing context: a qualitative study. Nurs. Health Sci. 19 (2), 157–162. https://doi.org/10.1111/nhs.12308.

Calvillo, E., Clark, L., Ballantyne, J.E., Pacquiao, D., Purnell, L.D., Villarruel, A.M., 2008. Cultural competency in baccalaureate nursing education. J. Trans. Nurs. 20 (2), 137–145. https://doi.org/10.1177/1043659608330354.

Cantey, D.S., Randolph, S.D., Molloy, M.A., Carter, B., Cary, M.P., 2017. Student-developed simulations: enhancing cultural awareness and understanding social determinants of health. J. Nurs. Educ. 56 (4), 243–246. https://doi.org/10.3928/01484834-20170323-11.

Chen, C.I., Huang, M.C., 2018. Exploring the growth trajectory of cultural competence in Taiwanese paediatric nurses. J. Clin. Nursg. 27 (23–24), 4331–4339. https://doi.org/10.1111/jocn.14526.

Constantinou, C.S., Papageorgiou, A., Samoutis, G., McCrorie, P., 2017. Acquire, apply, and activate knowledge: a pyramid model for teaching and integrating cultural competence in medical curricula. Patient Educ. Couns. 101 (6), 1147–1151. https://doi.org/10.1016/j.pec.2017.12.016.

Côté, J., Salmela, J.H., Baria, A., Russell, S.J., 1993. Organizing and interpreting unstructured qualitative data. Human Kinetics Journals 7 (2), 127–137. https://doi.org/10.1123/tsp.7.2.127.

Douglas, M.K., Rosenkoetter, M., Pacquiao, D.F., Callister, L.C., Hattar-Pollara, M., Lauderdale, J., Milstead, J., Nardi, D., Purnell, L., 2014. Guidelines for implementing culturally competent nursing care. J. Trans. Nurs. 25 (2), 109–121. https://doi.org/10.1177/1043659614520998.

Elminowski, N.S., 2015. Developing and implementing a cultural awareness workshop for nurse practitioners. J. Cult. Diver. 22 (3), 105–113.

Govere, L., Govere, E.M., 2016. How effective is cultural competence training of healthcare providers on improving patient satisfaction of minority groups? A systematic review of literature. Worldv. Evid-Based. Nurs. 13 (6), 402–410. https://doi.org/10.1111/wvn.12176.

Henderson, S., Horne, M., Hills, R., Kendall, E., 2018. Cultural competence in healthcare in the community: a concept analysis. Health Soc Care Community. 26 (4), 590–603. https://doi.org/10.1111/hsc.12556.

Innes, T., Calleja, P., 2018. Transition support for new graduate and novice nurses in critical care settings: an integrative review of the literature. Nurse Educ. Pract. 30, 62–72. https://doi.org/10.1016/j.nepr.2018.03.001.

Kang, C.M., Chiu, H.T., Lin, Y.K., Chang, W.Y., 2016. Development of a situational initiation training program for preceptors to retain new graduate nurses: process and initial outcomes. Nurse Educ. Today 37, 75–82. https://doi.org/10.1016/j.nedt.2015.11.022.

Kleinman, A., Benson, P., 2006. Anthropology in the clinic: the problem of cultural competency and how to fix it. PLoS Med. 3 (10), e294. https://doi.org/10.1371/journal.pmed.0030294.

Lin, C.J., Chang, P.R., Wang, L.H., Huang, M.C., 2015. Cultural competence course for nursing students in Taiwan: a longitudinal study. Nurse Educ. Today 35 (12), 1268–1274. https://doi.org/10.1016/j.nedt.2015.05.023.

Liu, W., Stone, T.E., McMaster, R., 2018. Increasing undergraduate nursing students' cultural competence: an evaluation study. Glob. Health. Res. Policy. 3 (7). https://doi.org/10.1186/s41256-018-0062-2.

Lu, P.Y., Tsai, J.C., Tseng, S.Y., 2014. Clinical teachers' perspectives on cultural competence in medical education. Med. Educ. 48 (2), 204–214. https://doi.org/10.1111/medu.12305.

Ministry of Health and Welfare, 2015. Supportive Grant for Teaching Program in Teaching Hospital (in Chinese). November/2015. Taiwan Ministry of Health and Welfare, Taipei.

Mobula, L.M., Okoye, M.T., Boulware, L.E., Carson, K.A., Marsteller, J.A., Cooper, L.A., 2015. Cultural competence and perceptions of community health workers' effectiveness for reducing health care disparities. J. Prim. Care Community Health 6 (1), 10–15. https://doi.org/10.1177/2150131914540917.

O'Connell, M.B., Korner, E.J., Rickles, N.M., Sias, J.J., 2007. Cultural competence in health care and its implications for pharmacy. Part 1. Overview of key concepts in multicultural health care. Pharmacotherapy. 27 (7), 1062–1079. https://doi.org/10.1592/phco.27.7.1062.

Olson, R., Bidewell, J., Dune, T., Lessey, N., 2016. Developing cultural competence through self-reflection in interprofessional education: findings from an Australian university. J. Interprof. Care. 30 (3), 347–354. https://doi.org/10.3109/13561820.2016.1144583.

Rhéaume, A., Clément, L., LeBel, N., 2011. Understanding intention to leave amongst new graduate Canadian nurses: a repeated cross sectional survey. Int. J. of Nurs. Stu. 48 (4), 490–500. https://doi.org/10.1016/j.ijnurstu.2010.08.005.

Roxburgh, M., Lauder, W., Topping, K., Holland, K., Johnson, M., Watson, R., 2010. Early findings from an evaluation of a post-registration staff development programme: the Flying Start NHS initiative in Scotland, UK. Nurse Educ. Pract. 10 (2), 76–81. https://doi.org/10.1016/j.nepr.2009.03.015.

Smith, L.S., 2018. A nurse educator's guide to cultural competence. Nurs. Manag. 49 (2), 11–14.

Tang, C., Tian, B., Zhang, X., Zhang, K., Xiao, X., Simoni, J.M., Wang, H., 2018. The influence of cultural competence of nurses on patient satisfaction and the mediating effect of patient trust. J. Adv. Nurs. https://doi.org/10.1111/jan.13854.

Tsai, S.S., Chang, S.C., Ho, M.J., 2008. Defining the core competencies of medical humanities education through the nominal group technique. J. Med. Educ. 12, 70–76.

Young, S., Guo, K.L., 2016. Cultural diversity training: the necessity of cultural competence for health care providers and in nursing practice. The Health Care Manager 35 (2), 94–102. https://doi.org/10.1097/HCM.0000000000000100.

Zamanzadeh, V., Roshangar, F., Fathi-Azar, E., Valizadeh, L., Kirkwood, J., 2014. Experiences of newly graduated nurses on strategies of gaining self-confidence during their initial work: a qualitative study. J. Nurs. Res. 2 (4), 283–291. https://doi.org/10.1097/jnr.0000000000000050.