Intercultural readiness of nursing students: An integrative review of evidence examining cultural competence educational interventions

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A R T I C L E   I N F O

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A B S T R A C T

With the mounting reports of culturally insensitive care and the reported challenges nurses experience when caring for culturally diverse patients, developing the intercultural readiness of nursing students is a necessity. However, little is known as to the success of cultural competence educational interventions in undergraduate nursing curricula and there remains a lack of consensus within the literature as to how it should be structured, organised and facilitated. Incorporating an integrative review method, this study synthesised international research on educational interventions used in preparing student nurses to care for culturally diverse patients. A systematic literature search of all published studies between 2013 and 2017, in CINAHL, Scopus, Medline, PubMed, Embase, Cochrane, Education Source and PsycINFO databases were performed. The PRISMA checklist was used to guide the review process. Six hundred and forty-four studies were screened for eligibility and the analysis of the fourteen included studies are presented within two overarching themes; increasing knowledge and understanding and developing commitment and confidence. Engaging student nurses in learning activities that augment their understanding of, and commitment to, providing culturally competent care must include a variety of integrated culturally responsive pedagogical approaches made explicit and continuously developed across all learning opportunities.

1. Introduction

The continued changing variables surrounding global migration patterns have resulted in a widening socio-cultural diversification of the patient population (Culley, 2014; Meissner and Vertovec, 2015). However, adapting caring practices to respond sensitively to a broadening culturally diverse patient population can be challenging. The growing global reports of culturally insensitive care is concerning and highlights the importance of nurturing culturally responsive care through education and practice (Almutairi et al., 2017; Kouvner et al., 2018; Markey et al., 2019). Cultural competence development can help with this, and the importance of developing cultural competence among nursing students is well recognised (Repo et al., 2017; Wang et al., 2018). Cultural competence is defined as an ongoing process of developing the knowledge, skills and attitudes for proving effective healthcare for culturally diverse patients, taking into account patients cultural behaviours, beliefs and needs (Cai, 2016; Papadopoulos et al., 2016). Culturally competent practice is essential for positive patient outcomes and for improving patient satisfaction (Shen, 2015). However, there is limited evidence regarding the most effective ways of developing cultural competence in undergraduate nursing curricula (Choi and Kim, 2018; Forss et al., 2019). Kaihlanen et al. (2019) call for a critical review of the various educational methodologies that are used to promote cultural competence development for nurses. Therefore, developing a greater understanding of the efficiency of undergraduate nurse educational interventions aimed at developing the intercultural readiness of nursing students and strengthening the capability and capacity to provide culturally competent care is paramount. This paper reports on an integrative literature review examining educational interventions used in preparing nursing students to care for culturally diverse patients.

2. Background

Enhancing cultural competence educational opportunities for nursing students as a means of cultivating a workforce that can respond appropriately to the holistic needs of culturally diverse patients is now
imperative (Wang et al., 2018; Halabi and de Beer, 2018). However, nurses commonly report feeling ill-prepared to care for culturally diverse patients (Hart and Marenco, 2016; Almutairi et al., 2017; Markley et al., 2018a,b), highlighting the need to re-examine the educational approaches used in the cultural competence preparation of student nurses. Despite the growing evidence reporting low levels of cultural competence among nursing students (Preposi et al., 2016; Halabi and de Beer, 2018; Wang et al., 2018), the educational interventions and pedagogical approaches used for cultural competence development are not well-defined in the literature. Mirza et al. (2019) acknowledge the importance of developing technical functionalities and the humanistic characteristics in nurturing the practice readiness of new graduates to provide quality and safe care. However, it is not possible to provide quality care without considering the culture, values and health beliefs of patients, families and communities, acknowledging the importance of respecting diversity among and within different cultural groupings (Papadopoulos et al., 2016; Jones et al., 2017). With the widening socio-cultural diversification of the patient population and the continued reports of culturally insensitive care, the intercultural readiness of new nurse graduates requires urgent consideration.

While many different educational methodologies can be found in nursing curricula, little is known about the effectiveness of various educational interventions in preparing nursing students to care for culturally diverse patients. Fors et al. (2019) draw attention to the challenges student nurses experience when caring for culturally diverse patients, highlighting the importance of examining the effectiveness of educational pedagogies and approaches to developing cultural competence. Targeted cultural competence courses within undergraduate nursing curricula support cultural competence development (Preposi et al., 2016). However, Lin et al. (2015) and Gallagher and Polani (2015) warn of the risks of cultural competence diminishing overtime, suggesting the need to re-examine ways of developing the intercultural readiness of nursing students. Greater consideration needs to be given not just to the content of nursing curricula, but also the educational philosophies and methodologies used in the cultural competence preparation of nursing students (McAllister, 2015; Almutairi et al., 2017).

Two systematic reviews examining the effectiveness of cultural competence training for registered nurses found that such interventions increased practitioners confidence, enhanced the quality of care provided and improved patient satisfaction (Clifford et al., 2015; Govere and Govere, 2016). Gallagher and Polani (2015) in their meta-analysis of educational interventions designed to enhance cultural competence for both student and registered nurses have shown varied effectiveness, but indicate the potential for cultural competence educational interventions. In a recent systematic review of published reviews between 2000 and 2012, examining interventions to improve cultural competence in healthcare suggest it remains unknown exactly what types of interventions are most effective, for whom and in what context (Truong et al., 2014). However, the interventions examined were not specifically educational interventions and were more focussed on registered nurses. On synthesising the results of these systematic reviews which examined the evidence between 2002 and 2013, they provide a baseline of knowledge in this area, but also highlight the need to examine the evidence since 2013. The need to strengthen cultural competence education for student nurses is imperative as a means of improving the care provided to culturally diverse patients (Truong et al., 2014; Wang et al., 2018). However, there remains a lack of consensus within the literature as to how this should be structured and organised and little is known about the problems and pitfalls of cultural competence educational interventions. This review considered papers that reported on educational interventions used to prepare nursing students to care for culturally diverse patients from 2013 to 2017, to form a comprehensive understanding of the current evidence base that can guide future nurse education and practice.

3. Aims and methods

3.1. Aims

This integrative review synthesised international research that focused on educational interventions used to prepare student nurses to care for culturally diverse patients.

3.2. Design

The integrative review method was the design chosen as it permits for the combination of diverse methodologies including qualitative, quantitative and mixed methods studies, providing for a comprehensive synthesis of a wide range of literature to draw conclusions from (Whittemore and Knafli, 2005). Including different study designs into this integrative review formulated a greater understanding of existing international research examining educational interventions. To ensure rigour and robustness, Wakefields’ (2015) seven stepped framework of; (1) generating a research question, (2) clarifying key search terms, (3) formulating inclusion and exclusion criteria, (4) selecting data bases, (5) literature searching, (6) analysis/synthesis and (7) presentation of findings was the methodological approach used. This framework was chosen as it offers a systematic process that incorporates sequential steps that are well explained and easy to follow, ensuring a robust literature search and synthesis. Other published integrative reviews have successfully used this framework (Mathews et al., 2018). Results were reported by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) checklist (see supplementary file 1) and PRISMA flow diagram (Moher et al., 2009), to promote transparency. The SPIDER strategy was used to develop the research question, scope of the review and helped focus the research process (Cooke et al., 2012).

3.3. Search method

A broad literature search was conducted where several terms were tested multiple times in various databases, ensuring that they located literature to answer the research question. The search strategy was devised using the SPIDER format as described in Table 1. Once the SPIDER question format was completed, keywords were formulated to enter into the search databases to retrieve relevant articles. The identified search terms were used across the electronic databases; CINAHL (Cumulative Index to Nursing and Allied Health Literature), Embase, PubMed, PsychINFO, Medline, Education Source, Scopus and Cochrane. Keywords were searched on the title, abstract and combined using Boolean operators “AND” and “OR” as well as subject headings for instance, in PubMed (i.e. “MeSH”) and CINAHL (i.e. “CINAHL Headings”) to broaden and focus the search. A wildcard, indicated by an asterisk (*), was used to expand the search or to programme the database to search for alternative spellings. Phrase-searching was used to group words together using quotation marks so that certain words would stay together. Proximity operator, which is a search technique used with keywords to find two words next to, near or within a specified distance

Table 1

| SPIDER | Description |
|--------|-------------|
| S – Sample | Nursing students on an undergraduate and pre-registration nursing programme. |
| P = Phenomenon of Interest | Student nurses development of cultural competence. |
| D – Design | All designs |
| E – Evaluation | Synthesis of individual peer reviewed studies reporting on University-led educational interventions used to prepare student nurses to care for patients from diverse cultural and ethnic backgrounds. |
| R – Research type | Qualitative, quantitative and mixed methods. |
of each other, was also used. The reference management software, Endnote, was used to help organise search results and identify duplicate citations.

3.4. Eligibility criteria

Inclusion and exclusion criteria assisted in the screening process of primary research studies published in peer reviewed journals. General eligibility depended on original peer-reviewed studies published in English in journals, between 2013 and 2017. Qualitative, quantitative and mixed methods studies which focused on university-led educational interventions, used to prepare student nurses to care for culturally diverse patients, were included. The purpose of specifying University-led educational interventions was the setting chosen to focus specifically on student nurses preparation. Studies were excluded if the study participants’ involved healthcare professionals outside of the nursing profession, reported on interventions used to improve cultural competency in healthcare or if the educational interventions were not adequately described and the outcomes discussed. Furthermore, studies reporting on study abroad exposures that did not examine the experiences of preparing student nurses to care for culturally diverse patients were excluded. Secondary sources such as dissertations were also excluded as they are not published in peer-reviewed journals and therefore not part of the inclusion criteria. A second inclusion screening was carried out on the initial results, explicitly focusing on student nurses on pre-registration general nursing programmes. Studies that included mixed sampling were only considered if student nurses were included in the sample. However, studies that had mixed participants, e.g., faculty with student nurses, were included because separating the groups would lead to misinterpreting the data.

3.5. Search outcome and screening

The search yielded 624 articles, where titles and abstracts could be
reviewed and following removal of duplicates (n = 45), 579 articles were retrieved. The review was limited to primary research studies, published in English in peer reviewed journals, eliminating a further 46 articles, resulting in 533 articles to be screened and were included in the review if they met the inclusion criteria. Following screening by title, abstract and at times reading the full text, a further 494 articles were excluded as they did not meet the inclusion criteria. Further screening was carried out of the remaining 39 articles to focus exclusively on educational interventions aimed at pre-registration general student nurses. Studies excluded in the second iteration were 22 resulting in 17 eligible studies. Results from the searches at each stage of the review process are illustrated in Fig. 1, using the PRISMA diagram.

4. Quality appraisal, data extraction and synthesis

The quality appraisal of the 17 studies was assessed using the Crowe Critical Appraisal Tool (CCAT) (Crowe, 2013). The tool features a scoring system, which scores each component of the study separately and is divided into eight categories that score on a Likert scale, ranging between 0 and 5, with a total possible score of 40. Three studies were scored below 30/40 and were subsequently excluded from this review. A data extraction framework guided by Kable et al. (2012) was adapted listing the author, year, title, country, study design, data collection, key findings, and limitations which were recorded in a table format (Table 2). Additional information such as themes and strength of evidence determined by the quality appraisal were later added.

A thematic analysis approach guided by Braun and Clarke (2006) was used to generate themes. Full-text articles were read and re-read for relevance to the research question. To work systematically through the literature, colour-coding of articles included writing notes on “post-its”. Different coloured highlighters helped identify segments of data that had interesting elements which could form the origin of repeated patterns or themes. The authors coded for as many possible themes and then collated them. Potential themes and codes were added to the data extraction table to assist with clarity and “code cards” were made from the codes found in each study. The findings were clustered by matching cards, called “collating codes”, which were formed into columns. This allowed for re-assessment of the analysis for broader themes related to the codes, as it involved organising the different codes into potential patterns and themes to enable data comparison and data visualisation.

5. Synthesis of findings

5.1. Descriptive characteristics of included papers

The origin of studies were conducted in eight countries, including Israel, Canada, Taiwan, United States, and, Australia. Three other collaborative studies conducted in Hong Kong, which collaborated with Sweden and Finland. A range of educational interventions were used in the studies reviewed: cultural simulation (n = 3), technology-supported intercultural learning initiatives (n = 3), practice in the clinical setting (n = 2) and cultural considerations in theoretical content (n = 6).

The 14 studies represented divergent types of research designs. The review included six quantitative, five qualitative and three mixed methodologies. Three studies incorporated mixed method designs (Courtney-Pratt et al., 2015; Everson et al., 2015; Ndiwane et al., 2017). From the six quantitative studies, two used quasi-experimental designs (Noble et al., 2014; Lin et al., 2015); two used quantitative pre- and post-test designs (Allen et al., 2013; Govere et al., 2016) and two used cross-sectional quantitative designs (Mesler, 2014; Flood and Commandador, 2016). Five of these studies used measurement instruments as data collection tools (Lin et al., 2015; Noble et al., 2014; Mesler, 2014; Govere et al., 2016; Allen et al., 2013). Demographic questionnaires (Mesler, 2014; Noble et al., 2014; Govere et al., 2016) and surveys (Allen et al., 2013; Noble et al., 2014; Flood and Commandador, 2016) were used.

Two out of five qualitative studies used qualitative descriptive designs (Henderson et al., 2016; Chan et al., 2017), while other studies used; qualitative content analysis (Chan and Nyback, 2015), qualitative interpretive design (Carlson et al., 2017) and grounded theory (Blanchet Garneau and Pepin, 2015). Data collection methods used included: reflective journals (Chan and Nyback, 2015; Carlson et al., 2017; Chan et al., 2017), group interviews/focus groups, (Blanchet Garneau and Pepin, 2015; Henderson et al., 2016; Carlson et al., 2017; Chan et al., 2017), Skype-based debriefing sessions (Chan et al., 2017), transcribed written-oral presentations and assignments (Chan and Nyback, 2015) and observation (Blanchet Garneau and Pepin, 2015).

5.2. Identified themes

Two overarching themes emerged from the analysis and synthesis of the educational interventions used in the fourteen studies reviewed: increasing knowledge and understanding and developing commitment and confidence.

5.2.1. Increasing knowledge and understanding

All fourteen studies reported on the value of educational interventions used in undergraduate nursing curricula that focussed on preparing students with the knowledge and understanding required to care for culturally diverse patients. Twelve studies addressed the development of knowledge and reported on the importance of developing cultural knowledge when caring for patients from different cultures (Allen et al., 2013; Mesler, 2014; Noble et al., 2014; Courtney-Pratt et al., 2015; Chan and Nyback, 2015; Blanchet Garneau and Pepin, 2015; Henderson et al., 2016; Flood and Commandador, 2016; Govere et al., 2016; Chan et al., 2017; Carlson et al., 2017; Ndiwane et al., 2017). Blanchet Garneau and Pepin (2015) contextualise the importance of preparing nurses to provide culturally responsive care and their findings highlight the need to develop a “knowledge base that is essential for coping with the complexity of care in a culturally diverse context” (p.1066), for this to occur.

Simulation and patient scenarios that incorporated cultural considerations, intercultural web-based learning and cross-cultural caring encounters in clinical practice were reported as effective educational interventions that helped prepare students to care for culturally diverse patients. The benefits of simulation as a means of rehearsing opportunities to act out cross-cultural caring encounters in a safe environment, created a greater understanding of the need for cultural awareness and knowledge (Everson et al., 2015; Courtney-Pratt et al., 2015; Ndiwane et al., 2017). Three studies reported on the benefits of collaborative intercultural learning initiatives that combine intercultural and international dimensions of learning through technologies (Chan and Nyback, 2015; Carlson et al., 2017; Chan et al., 2017). Students reported how they developed cultural knowledge through engaging with students from different cultural backgrounds, through sharing cultural values and beliefs, acknowledging the importance of respecting cultural difference when planning care. However, Chan et al. (2017) raise the issue of possible cultural differences in learning behaviours amongst students from different nationalities, which must be considered when designing intercultural educational interventions aimed at nurturing cultural competence.

Exploring similarities and differences of care needs from different cultural perspectives helped increase knowledge and understanding of culturally responsive care. Opportunities to acknowledge similarities inculcultural beliefs and values, learning styles, and educational methodologies helped culturally diverse students feel comfortable to share beliefs, experiences and supported intercultural learning (Carlson et al., 2017). Chan and Nyback (2015) describe the trajectory of how students developed new cultural understandings and became more adaptable in their holistic approach to caring for culturally diverse patients. “Students were inspired by the process of contrasting their own cultural understanding with the other persons views of reality” (Chan and
Table 2
Data extraction table.

| Country                | Author(s) and year | Study Design                                      | Data Collection                           | Sample size and site | Comments/Key findings                                                                 | Themes                                                                 | Limitations                                                                 | Include/Exclude Appraisal Score |
|------------------------|--------------------|---------------------------------------------------|-------------------------------------------|----------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------|
| Sweden and Hong Kong   | Carlson et al. (2017) | A qualitative and interpretative design was adopted to capture the perspectives of nursing undergraduates perceived learning outcomes after participating in a web-based intercultural peer-learning intervention. | Reflective journals and group interviews. | A convenience sample of 20 third-year nursing students, ten from each university – based in Hong Kong and Sweden. | Main theme: nursing viewed as universal, stemmed two sub-themes: 1. Mirroring nursing through an intercultural lens (professional nursing and nursing interventions) 2. Reflecting on personal action and the action of others (awareness of one’s own culture and that of others and readiness to work internationally). | Encounters; Cultural awareness; Peer learning; Reflection; Intercultural learning; Knowledge. | Authors have not reported on the technical difficulties ‘students experienced during webinars. Problems with bias. | Include. Score: 38/40 (95%). |
| Hong Kong and Finland  | Chan and Nyback (2015) | Qualitative content analysis to explore and describe how a virtual course in intercultural communication between students in two universities, through internationalisation at home can support the development of cultural competence. | Transcribed written and oral presentations during the intercultural communication course. | A total of 20 first year students in the baccalaureate degree programme, 10 from each university. Purposive sample was carried out in Finland and Hong Kong. Both courses on cultural care and caring were expected learning outcomes. | Four themes emerged: 1) Virtual Caravan (metaphor); is described through the categories Extended information, Inspiration, and Teamwork. 2) Commitment; is described through the categories Communication, Mutual respect and friendship, Not giving up. 3) Inclusiveness describes how theory and practice belong together (discovered similarities). 4) Perception with Understanding. | Communication styles; Collaborative learning; Experiential learning; Awareness; Openness to diversity; Encounters. | Small sample size. Authors did not critique their own role for bias against the findings of the study. | Include. Score: 35/40 (88%). |
| Hong Kong and Sweden   | Chan et al. (2017)   | A descriptive qualitative approach exploring students’ experiences of their behaviours and engagement with students from a different cultural background and their perceptions of the process via Skype. | Skype debriefings sessions. Focus group discussion. Reflective journals. | Convenience sample of 20 undergraduate students, from university 10 from Hong Kong and 10 from Sweden. | Two themes were identified: 1) Failure of students interacting with each other. The first encounter resulted in a one-sided discussion as Hong Kong students seemed teacher-dependent and task-oriented while the Swedish students felt trepidation. Resulting in anxiety vs learner-centred approach was resolved by relaxation. 2) Students’ perception of enablers to intercultural learning & | Encounters; Communication; Exposure; Interaction; Confidence; Intercultural learning; Experiential learning; Knowledge. | Study does not assess how Skype may obstruct or aid the content or structure of the conversations. Problems with bias. | Include. Score: 39/40 (98%). |

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Table 2 (continued)

| Country | Author(s) and year | Study Design | Data Collection | Sample size and site | Comments/Key findings | Themes | Limitations | Include/Exclude Appraisal Score |
|---------|--------------------|--------------|-----------------|----------------------|------------------------|--------|-------------|---------------------------------|
| Australia | Courtney-Pratt et al. (2015) | Mixed methods design of quantitative and qualitative data. To examine the impact of the 3D cultural empathy simulation and to evaluate students’ satisfaction with the simulation experience. | Satisfaction with Cultural Simulation Experience Scale (SCSES) and qualitative analysis of responses to an open-ended question. | Purposive sample of 497 s-year nursing students were selected from three universities participated in the simulation experience as part of their preparation for clinical placement | Students’ perception of the enablers: the shift in focus from factual to experiential knowledge; a relaxed attitude with more questioning & deeper learning; a sense of comfort arose through a perceived similar level of English competence and confidence developed from students’ perceived commonalities. | Communication. | Problems with self-report. Problems with bias. | Include. Score: 39/40 (98%). |
| Australia | Henderson et al. (2016) | Descriptive qualitative design was used to gain insight into how clinical nurses, clinical facilitators, nurse academics, and student nurses experienced intercultural communication challenges in the classroom and clinical settings. | Focus groups interviews some via telephone | Purposive sample of 41 nursing participants & experience of intercultural communication. 19 clinical facilitators, 5 clinical nurses, 10 nursing students, 7 nurse academics. Sample was drawn | Clinical scenarios; Simulation. Empathy. Confidence; Motivation; Cultural awareness. Application of knowledge. | Intercultural communication; Awareness; Cultural encounters; Empathy; Cultural knowledge. | Did not assess how the videophone may obstruct or aid the content or structure of the conversations with nurse academics. Findings are limited to Australian context. | Include. Score: 38/40 (95%). |
| Country Author(s) and year | Study Design | Data Collection | Sample size and site | Comments/Key findings | Themes | Limitations | Include/Exclude Appraisal Score |
|----------------------------|--------------|-----------------|----------------------|------------------------|--------|-------------|---------------------------------|
| Canada Blanchet Garneau and Pepin (2015) | Qualitative grounded theory design to study cultural competence to aid the development a theoretical proposition of the process involved in the development of cultural competence among nurses and student nurses from a constructivist perspective. | Observation and semi-structured interviews. | Purposive sample of 24 participants comprising of 13 nurses and 11 students working in three community health settings. | English. Strategies participants used to mitigate challenges included resorting to cultural validation through alliance building, proactively seeking clarification, and acquiring cultural awareness knowledge. 1. Development is a process of reflection and action that consists of learning to bring the different realities together to provide effective care in a culturally diverse context. 2. Process involves developing the three dimensions of cultural competence: building relationships, working outside the usual practice framework, reinventing practice in action. 3. Three levels of development triggered by clinical immersion experience, whether local or international. 4. Learning environment. | Personal trajectory; Intercultural encounters; Motivation; Confidence; Awareness. | Small sample size. | Include. Score: 35/40 (88%). |
| United States of America (USA) Flood and Commenrador (2016) | Quantitative descriptive; cross-sectional design to evaluate baccalaureate nursing students' perspectives on their acquired cultural competency following the integration of a transcultural nursing thread throughout the curriculum. | Survey | Convenience sample of 56 graduating senior nursing students over a 2-year period participated in the study. | Survey consisted of questions related to attitudes toward cross-cultural care, preparedness to care for diverse patient populations, self-assessment of skills, and reports of educational experiences. Results: Students perceived themselves as somewhat prepared to provide culturally competent care. Limited exposure and utilization of interpreters, lack of role models and mentors, and unpreparedness to reassure different cultures in the area of terminal health. | Knowledge; Communication; Role models; Preparedness. | Lacks rigour of intervention. Problems with self-report. Small sample size. Problems with bias. Results not generalisable. | Include. Score: 35/40 (85%). |
### Table 2 (continued)

| Country                      | Author(s) and year | Study Design                                                   | Data Collection                                                                 | Sample size and site | Comments/Key findings                                                                                                                                                                                                 | Themes                                                                 | Limitations                                                                 | Include/ Exclude Appraisal Score |
|------------------------------|--------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------|---------------------------------|
| United States of America (USA) | Ndiwane et al. (2017) | Mixed methods design of quantitative and qualitative data to examine the learning activity with pre- and post-assessments of knowledge regarding cultural issues and levels of student satisfaction. | Convenience sample of 63 nursing students from a university volunteered to participate (57 women and 6 men, representing 97% of class enrolment. 81% (51 students) completed pre- and post-surveys. | Course content included a pre-test cultural assessment survey; didactic content, including a video depicting a cultural assessment interview; a digital recording of each student doing a clinical interview with an ethnic patient and a post-test cultural assessment and satisfaction surveys. Results: Standardized patient scenarios scored highest for satisfaction, followed by critical thinking, and with self-confidence scoring lowest. 33 students completed a survey following participation in the teaching and learning approach at post-measures about their confidence to practice cross-cultural nursing and about their discriminatory attitudes. Survey findings supported the effectiveness of this strategy in promoting students' confidence regarding knowledge about cross-cultural nursing. There was no reported change in discriminatory attitudes. The teaching and learning approach was modified to include stronger experiential learning and role-playing. | Clinical performance; Simulation; Self-confidence; Experiential learning. | Problems with sampling (number of participants involved in the study do not correspond in abstract and full text). Small sample size. Drop in response rate; post-survey. | Include. Score: 30/40 (75%). |
| Australia                    | Allen et al. (2013)  | Quantitative design using pre- and post-survey measures was used to evaluate the teaching and learning approach in cross-cultural care and anti-discrimination for undergraduate nursing students. | Convenience sample. In total 38 comprising of 5 academics and 33 s-year undergraduate nursing students from university. | Low response rates (13.2%). Author acknowledged participant fatigue as all students had to complete surveys for every subject upon completion of each semester. Findings cannot be generalised. Problems with bias. | Egalitarian; Antidiscrimination; Attitudes; Reflection; Confidence; Experiential learning; Knowledge and Roleplay. | Include. Score: 39/40 (98%). |
| Taiwan                       | Lin et al. (2015)   | A quantitative quasi-experimental, longitudinal research design to evaluate the Cultural Competence Assessment Instrument-Chinese Version (CCA-CV). | Purposive sample, subjects were recruited from two universities. | Participants were not selected at random. | Behaviours and Attitudes; Motivation; | Include. Score: 37/40 (93%). |

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Table 2 (continued)

| Country      | Author(s) and year | Study Design                                              | Data Collection                                      | Sample size and site                                      | Comments/Key findings                                                                                     | Themes                                                              | Limitations                                                                 | Include/ Exclude Appraisal Score |
|--------------|--------------------|-----------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------|
| Australia    | Everson et al. (2015) | Multi-site mixed methods study where pre- and post-test design was used to measure the impact of 3D cultural simulation experience of nursing students' cultural empathy. | Modified version of the Kiersma-Chen Empathy Scale (MKCES). | Convenience sample of 460 3-year undergraduate nursing students. Facilitated by the university. | In total 105 nursing students. 51 participants in experimental group and 54 participants in control group. before and after the course and again 6–8 months after the two groups (experiment and control) had completed the clinical practicum. The results of a generalised estimating equation (GEE) analysis indicate that the cultural competence of all participants had improved at the post-test 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 decline highlights the critical need for cultural competence education to keep pace with academic and clinical practices and the necessity of continuous educational enhancement and maintenance. Out of 530, 460 participated with an overall response rate of 87%. Students' empathy towards culturally and linguistically diverse patients significantly improved after exposure to the 3D simulation experience. The video is followed by a debriefing and guided reflection. Further analysis indicated that, on average, participants reported significantly higher mean scores on the MKCES post-simulation 49.24 (SD = 5.18) compared to pre-simulation 47.86 | Awareness; Sensitivity. | Problems with bias | Participants were not selected at random. Problems with measurement device as this is the first time that the MKCES has been used for pre–post-testing these results should be interpreted with caution and indicate the need for ongoing research. | Include. Score: 39/40 (98%). |

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| Country | Author(s) and year | Study Design | Data Collection | Sample size and site | Comments/Key findings | Themes | Limitations | Include/ Exclude Appraisal Score |
|---------|-------------------|--------------|-----------------|----------------------|-----------------------|--------|-------------|--------------------------------|
| Israel  | Noble et al.      | A quantitative quasi-experimental study to evaluate the effectiveness of an educational intervention to increase general cultural competence of first year nursing students. | Surveys and pre- and post-testing instrument (A demographic data instrument and Campinha-Bacote’s Inventory for Assessing the Process of Cultural Competence Among Healthcare Professional- Revised; (IAPCC-R).) | Convince sample of 146 first-year nursing students from two nursing schools. Experimental/ intervention group (n = 58) of students from one school and a control group (n = 88) including students from two schools. Overall response rate of 94% for the intervention group and 75% for the control group. The control groups received the standard classes that were traditionally taught in the Introductory Nursing course. The standard class did not include a formal lecture on culture or cultural competence. The intervention group received cultural competence education. Students prepared and delivered a group presentation about a cultural group in Israel, basing the presentation on Campinha-Bacote’s five constructs. Control groups’ presentation included the following: family structure, impact of illness on family and patient’s daily life, and family’s ethnic/cultural practices in coping with illness. Teaching strategies that were employed for both the intervention and control groups included group presentations and role-playing. Students who received the educational had significant increase in scores (68 ± 6 to 73 ± 6, p = .000), compared to control group (67 ± 6 to 66 ± 6). | (SD = 4.64); t (459) = 4.639, p < 0.001. The results of this study indicate that the 3D cultural simulation had a significant impact on participants’ cultural empathy (MKCES) scores. | Knowledge; Integrated learning; Awareness; Cultural knowledge; Roleplay. | Problems with sampling, group balance. Lacks inclusion and exclusion criteria. Unclear ethics. | Include. Score: 35/40 (88%). |
| USA     | Govere et al.     | Quantitative study that evaluated the effectiveness of the Culturally Competent Nursing Modules (CCNMs) by using a pretest-posttest design | A demographic data instrument and Campinha-Bacote’s IAPCC-R. | Convenience sample of 18 students (13 junior and 5 senior students) at university participated in the Students completed the Culturally Competent Nursing Modules (CCNM) over a 2-week period, and their pre- and post- | Problems with sampling. Small sample size, results cannot be generalised. Lacks control | Self-directed learning; Awareness; Desire; Cultural knowledge; Encounters; | Include. Score: 28/40 (70%). | (continued on next page)
| Country | Author(s) and year | Study Design | Data Collection | Sample size and site | Comments/Key findings | Themes | Limitations | Include/ Exclude Appraisal Score |
|---------|--------------------|--------------|-----------------|----------------------|-----------------------|--------|-------------|---------------------------------|
| USA     | Mesler (2014)      | Quantitative comparative; exploratory cross-sectional design. To evaluate the cultural competence and cultural confidence levels of nursing students in three types of programme: those with integrated cultural content, those with a non-nursing cultural course and those with a cultural course in nursing across three academic levels (freshmen, junior and senior). | Three instruments used: demographic questionnaire, Inventory to Assess the Process of Cultural Competence Among Healthcare Professionals-Revised (IAPCC-R) to measure cultural competence and the Transcultural Self-Efficacy Tool (TSET) to measure self-efficacy or confidence | Convenience sample of 759 nursing students in 6 baccalaureate nursing programmes. Sample obtained from university. | Training cultural competence was assessed. For the posttest IAPCC-R assessment, one participant did not respond, and the missing data were replaced with overall mean values. | Motivation; Cultural skills. | Problems with self-report. Problems with bias. Findings cannot be generalised | Include. Score: 35/40 (88%). |

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| Country | Author(s) and year | Study Design | Data Collection | Sample size and site | Comments/Key findings | Themes | Limitations | Include/Exclude Appraisal Score |
|---------|-------------------|--------------|-----------------|----------------------|-----------------------|--------|-------------|--------------------------------|
| USA     | Reyes et al. (2013) | Quantitative comparative, descriptive design to examine whether the self-perception of cultural competence in baccalaureate nursing students increased during the nursing programme because of their education and experiences. | Convince sample of 99 baccalaureate nursing students at university. Beginning/sophomore students (n = 46) and graduating students (n = 53). | The findings showed that nursing students perceived that they had become culturally competent during their nursing education. This study was done during a period of curriculum revision and highlighted the need for continued education relating to this concept beginning with the first course and continuing throughout the nursing curriculum. | Perceptions; Behaviours; Assumptions. | Findings cannot be generalised. Participant ethics not clear. Problems with sampling. Problems with self-report. Lacks inclusion and exclusion criteria. Lacks blinding. | Excluded due to poor design and not answering research question. Score: 26/40 (65%). |
| USA     | Diaz et al. (2015)  | Qualitative exploratory design of a multimethod assessment of nursing education programmes to promote culturally congruent practice in a single rural state. | Self-report cultural proficiency data were collected through survey data and focus groups. Instrument used was the Inventory for Assessing the Process of Cultural Competence in Healthcare Professionals-Revised (IAPCC-R). | Purposive sampling consisted of 102 participants: 26 master’s level nursing students, 35 community college nursing faculty, 24 university nursing faculty, and 17 clinical educators. | The purposive sample were surveyed regarding their perceived cultural competence, and cultural education content was assessed in nursing programmes. Compared scores on the IAPCC-R from university faculty teaching at the bachelor’s degree nursing (B.BN) and masters (MSN) levels. Faculty described methods of teaching in which cultural content was applied through case studies and a | Self-awareness; Self-perceptions; Desire; Increasing knowledge. | Lacks ethics Results of the study cannot be generalised. Problems with sampling. Lacks blinding. Problems with self-report. Problems with bias. Lacks inclusion and exclusion criteria. | Exclude due to lack of ethics and not answering research question. Score: 28/40 (70%). |
Nyback 2015, p. 831). Although the strengths and challenges of the learning experiences were acknowledged, students were encouraged to develop new cultural knowledge and understanding through these educational interventions. Carlson et al. (2017) found that enhancing nursing students’ understanding of the nursing profession from a cultural perspective helped improve their ability to provide quality care to a culturally diverse patient population.

The benefits of educational interventions that provided opportunities to rehearse and prepare students for cross-cultural caring encounters in clinical practice, such as role-playing were reported in 3 studies (Flood and Comendador, 2016; Lin et al., 2015; Noble et al., 2014). Allen et al. (2013) and Noble et al. (2014) highlight the importance of experiential learning through role-playing, whereby one student plays the role of the nurse and another plays the role of a culturally diverse patient. While, Courtney-Pratt et al. (2015) and Ndiwane et al. (2017) propose the use of simulation-enhanced knowledge for clinical encounters, as students learned to respect and accept different ways of approaching intercultural communication. Opportunities to apply knowledge gained in the classroom to cross cultural caring encounters in clinical practice helped contextualise and further develop knowledge and understanding (Blanchet Garneau and Pepin 2015; Henderson et al., 2016). The importance of having well supported clinical practice experiences helped apply learning to cross-cultural caring encounters. Flood and Comendador (2016) found that students felt they learned best in the clinical setting, compared to the classroom setting, however, acknowledged that there was a lack of positive role models in clinical practice, which ultimately impacted on student learning. In contrast, Blanchet Garneau and Pepin (2015) found that students observed more
experienced nurses and tried to imitate their approach, reporting on the benefits of such learning. Nonetheless, three studies recommend the need for ongoing cultural education and training for all registered nurses in the clinical environment (Blanchet Garneau and Pepin, 2015; Flood and Commendador, 2016; Henderson et al., 2016).

5.2.2. Developing commitment and confidence

Developing commitment to provide quality care in culturally responsive ways was reported as important in six of the studies reviewed (Mesler, 2014; Courtney-Pratt et al., 2015; Henderson et al., 2016; Courtney-Pratt et al., 2015, 2015; Noble et al., 2014; Govere et al., 2016). Chan and Nyback (2015) describe commitment as “not giving up” and stress that commitment is necessary for effective communication and nurse-patient relationship building. Lin et al. (2015) and Henderson et al. (2016) report that student nurses want to become more knowledgeable about cultural difference and as a result were committed to exploring ways of improving care delivery to culturally diverse patients. Similarly, participants in Blanchet Garneau and Pepin’s (2015) study expressed the idea that commitment initiates the desire to provide culturally competent care. Although students want to improve their delivery of care to culturally diverse patients (Lin et al., 2015), they need to appreciate the value of the educational intervention, if they are to benefit from it (Courtney-Pratt et al., 2015). Govere et al.’s (2016) study showed that students’ commitment to providing culturally competent care was not affected by a specific standalone module on cultural care. Instead, Blanchet Garneau and Pepin (2015) describe how student nurses improved their confidence in their ability by accumulating knowledge and experiences of ongoing cross-cultural encounters. However, this study also reported that students continued to experience challenges with addressing end-of-life care, religious beliefs and cultural preferences, suggesting that mastering and developing confidence in the delivery of such elements of care were not perceived as an initial priority.

Three studies reported on the value of using simulation as a means of developing confidence to care for patients from different cultural and linguistic backgrounds (Everson et al., 2015; Courtney-Pratt et al., 2015; Ndiwane et al., 2017). Students reported that cultural simulation is an “authentic, engaging and thought-provoking learning experience” (Courtney-Pratt et al., 2015, p.534). Debriefing and guided reflection on performance have been identified as critical aspects of simulation, where students are provided opportunities to make sense of their learning (Courtney-Pratt et al., 2015; Everson et al., 2015). However, Ndiwane et al. (2017) and Courtney-Pratt et al. (2015) suggest that the impact of simulation and the effects of confidence development require further consideration, as although students value it, low confidence levels were found. Mesler (2014) draws attention to other confidence influencing factors such as ethnicity as students from ethnic minority groups scored higher in cultural knowledge but they “did not feel confident in their own ability” (Mesler 2014, P196). Nonetheless, other studies found that intercultural student engagement and participation helped with developing the confidence and open-mindedness required for cross-cultural caring relationships (Chan et al., 2017; Blanchet Garneau and Pepin, 2015; Chan and Nyback, 2015).

6. Discussion

This integrative review synthesised the existing body of research that focused on educational interventions used to prepare student nurses to care for culturally diverse patients. It provides evidence that integrating cultural considerations of care early in an undergraduate nursing programme and providing continuous supportive opportunities to engage in cross-cultural encounters, during clinical placements and through intercultural student learning activities are effective. This study reaffirms the calls for establishing cultural competence as a graduate capability in undergraduate nursing curriculum, as recommended by others (Markey and Okantey, 2019). It draws attention to the importance of ensuring cultural competence development and intercultural readiness of new graduates a more explicit responsibility for students and nurse educators within all learning and teaching approaches. However, this review highlights that the overall effectiveness of cultural competence learning diminished over time in some studies (Allen et al., 2013; Lin et al., 2015); highlighting the importance of ensuring such learning opportunities are continuously developed both in theory and practice. In other studies it was difficult to identify the long-term effects of educational interventions as the evaluations were done immediately after the intervention, highlighting the need to strengthen robust methodological approaches. More longitudinal evaluations would be beneficial as Allen et al. (2013) and Chan et al. (2017) suggest that careful consideration is needed when choosing approaches to appraise educational interventions. Similarly, Forss et al. (2019) call for more longitudinal studies examining the long term effectiveness of cultural competence educational interventions.

Educational interventions that incorporated supportive cross-cultural engagement and intercultural learning amongst culturally diverse students were highly valued (Chan and Nyback, 2015; Carlson et al., 2017; Chan et al., 2017). With the growing cultural and ethnic diversity of the student population, planning and developing intercultural learning opportunities in the classroom has the potential to overcome some of the fears associated with engaging with culturally diverse patients in clinical practice. Intercultural learning is a process of developing an understanding and appreciating one’s own culture and the culture of others (Hollinderbaumer et al., 2013). The benefits of experiencing intercultural learning and interaction during educational interventions provided a sense of ease at sharing cultural values, beliefs and behaviours. This helped with developing an understanding of themselves and others, concurring with others who report on the benefits of intercultural learning as a means of developing cultural competence (Brown et al., 2016; Repo et al., 2017; O’ Brien et al., 2019).

Careful facilitation is required to encourage culturally diverse students to share their experiences and cultural norms, whilst exploring similarities and differences of beliefs and values amongst and within different cultural groupings is important. However, O’ Brien et al. (2019) warn of the importance of sensitively addressing ethnocentric ideologies with regards to academic ability, cultural norms and nursing practice within the intercultural learning context, for it to be successful. This study adds to this discourse by highlighting the importance of reflection and debriefing to understand and “make sense” of learning from experience by gaining new insights regarding cultural awareness and nursing practices (Allen et al., 2013; Courtney-Pratt et al., 2015; Everson et al., 2015; Lin et al., 2015; Blanchet Garneau and Pepin, 2015; Carlson et al., 2017). Blanchet Garneau and Pepin (2015) suggest that educational interventions should focus on bringing realities together through reflection and action to empower students to react to complex circumstances in culturally diverse situations. Opportunities for sense making, sharing cultural beliefs and experiences and guided group reflection, are learning activities that help challenge assumptions and encourage new ways of thinking and learning about culturally responsive care. While Carlson et al. (2017), argue that reflection on the learning process is equally important as it supports students’ reflection on their own knowledge and professional development. This study draws attention to the responsibilities of nurse educators to integrate a variety of educational methodologies that provide meaningful opportunities to nurture the development of cultural competence and the intercultural readiness of new graduates. However, some nurse educators lack confidence in facilitating cultural competence development, suggesting the need for greater support, training and development of cultural competence and intercultural facilitation skills (Starr et al., 2011).

Student nurses have an awareness of the need to provide quality nursing care in culturally responsive ways, however, lack the confidence to do so in clinical practice (Markey et al., 2018). Educational interventions that incorporated activities that encouraged students to role
play cross-cultural encounters or apply learning in clinical practice were beneficial in developing confidence and understanding (Allen et al., 2013; Noble et al., 2014; Blanchet Garneau and Pepin, 2015; Flood and Commandador, 2016; Henderson et al., 2016). Similarly, Choi and Kim (2018) found that cultural competence development is strengthened for nursing students when opportunities for cultural experiences and cross-cultural encounters are incorporated in curriculum design. Simulation and role playing cross-cultural caring encounters encourages students to take on different roles, enabling them to appreciate how culture influences caring experiences. Blanchet Garneau and Pepin’s (2015) study reinforced the idea that engagement with patients from other cultures helped increase awareness and identify challenges related to quality nursing care. Likewise, Henderson et al. (2016) concluded that cultural awareness enables nurses to recognise the specific needs of patients from different cultures, their specific values, beliefs and practices.

As reported elsewhere, the importance of developing cultural awareness is essential (Halabi and de Beer, 2018; Wang et al., 2018). However, this study highlights that cultural awareness in isolation is not enough to prepare student nurses to provide culturally responsive care, as they need cultural knowledge, understanding, commitment and confidence. Blanchet Garneau and Pepin (2015) conclude that merely knowing about patients’ cultures does not mean that culturally competent care will be provided. Some studies in this review although acknowledged the value of clinical placements, reported on the lack of role models and support in the clinical environment (Blanchet Garneau and Pepin, 2015; Henderson et al., 2016; Flood and Commandador, 2016). This review re-iterates the need for clinical learning environments that encourages student nurses to take responsibility for cultural competence development, whilst providing positive role models to facilitate such learning. Flood and Commandador (2016) argue that educational interventions are more impactful if there are effective role models in clinical practice to help apply their learning and influence changes and improvements to practice. There is a need for further research to examine how student nurses apply their learning in clinical practice.

The importance of developing cultural knowledge as one of the key strategies utilised by student nurses in practice to alleviate intercultural communication challenges was identified in a number of the studies reviewed (Chan and Nyback, 2015; Flood and Commandador, 2016; Henderson et al., 2016; Chan et al., 2017. Blanchet Garneau and Pepin (2015) reported that developing an understanding of different cultures brought “different realities together” and empowered students to adapt their practice into action to make it suitable to meet the needs of culturally diverse patients. Cooper-Gamson (2017) draws attention to the importance of having cultural awareness and knowledge to help adapt practices to provide culturally responsive stoma care. Within the wider literature, there is much debate regarding cultural knowledge, suggesting that teaching student nurses about the beliefs of various cultural groups in isolation is not conducive to supporting the intercultural readiness of student nurses (McAllister, 2015; Almutairi et al., 2017; Markey and Okantey, 2019). This study adds to these existing debates, highlighting the need for integral educational approaches that transcend beyond cultural-specific knowledge, as a means of addressing the challenges student nurses experience when caring for culturally diverse patients as identified in a scoping review carried out by Fors et al. (2019).

7. Limitations

This integrative literature review only included studies that reported on evaluations of University-led educational interventions that specifically focussed on the preparation received to care for culturally diverse patients. Studies that involved other elements of interventions that may also be beneficial for preparing student nurses to care for cultural differences were not included, increasing the risk for study selection bias. The search was limited to studies between 2013 and 2017, which may bring limitations by leaving out important studies completed before or after the defined period. Despite the limited time-frame set out for this review, there was a large volume of literature on cultural care to examine, which needed to be filtered and refined, therefore, having a specific focus was helpful. Guidance from the librarian helped develop and refine search strategies. The variation in cultural care terminologies used within individual studies was challenging. The review investigated a specific research question, primarily focusing on student nurses and educational interventions facilitated by a university in the classroom and clinical setting. The rationale for refining the question and inclusion/exclusion criteria may have excluded some key studies which may have contributed to other insights into the value of educational interventions in preparing student nurses for cross-cultural caring encounters. This study focussed on general student nurses only, the views of nurses as a whole are also paramount and need to be further investigated. It was challenging to synthesise findings from the studies included because of the diverse range of interventions and the differences in curriculum structures of pre-registration nursing programmes across countries. Although the inclusion of quantitative, qualitative and mixed-methods evidence was useful, the complexities with synthesising this evidence must be acknowledged.

8. Conclusion

Nurse educators are increasingly challenged to develop education methodologies and pedagogical interventions that nurture the intercultural readiness of graduates to care for culturally diverse patients. This paper examines the evidence on educational interventions used to prepare student nurses to care for culturally diverse patients. Nurse educators and students need to appreciate the value of how cultural competence educational interventions can help nurture knowledge, understanding, commitment and confidence in providing quality care for culturally diverse patients. Adopting a variety of integrated learning and teaching approaches that encourage ongoing supportive cross-cultural engagement and provide opportunities for cultural competence development are essential.

Contributions

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Declaration of competing interest

All authors have no conflict of interest to declare with regards to any financial and personal relationships with other people or organisations that could inappropriately influence (bias) this work.

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Appendix A. Supplementary data

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