



# Available online at www.sciencedirect.com

# **ScienceDirect**

Procedia
Social and Behavioral Sciences

Procedia - Social and Behavioral Sciences 132 (2014) 262 – 268

6<sup>th</sup> International Conference on Intercultural Education "Education and Health: From a transcultural perspective"

# Design and evaluation of an educational course in cultural competence for nursing

Paloma Garcimartín Cerezo<sup>a</sup>\*, Mª Serra Galceran, Mª González Soriano, Lª Mestres Camps, JMª Leyva Moral

<sup>a</sup> Pompeu Fabra University. Escola Superior d'Infermeria del Mar. 08003 Barcelona, Spain.

#### Abstract

The Escola Superior d'Infermeria del Mar proposed to incorporate the skills acquisition of cultural competence in the curricula design of the new Nursing Degree; to get it, an optional course was created (Cultural Competence) within the 3rd quarter of 3rd year. The aim of this study is to evaluate the effectiveness of training for the acquisition of Cultural Competence in nursing students. Is a quasi-experimental pretest-postest design with a single group in two consecutive courses (2011-12/2012-13). Data were collected through an ad-hoc 16 items Likert questionnaire at the beginning (pre-test) and the end of the course (post-test). A total of 43 students participated in the study. Statistically significant differences were observed in two items of the pretest results and no difference in post-test results. To confirm pretest and posttest hypothesis, results were compared after the educational intervention, finding significant differences in all survey items. The design of the course, in which knowledge and skills were worked, appears to be effective in acquiring cultural competence.

© 2014 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license. Selection and peer-review under responsibility of HUM-665 Research Group "Research and Evaluation in Intercultural Education".

Keywords: cultural competence; cross-cultural care encounter; multicultural; health disparities; nursing degree; nursing care; educational intervention; questionnaire

#### 1. Introduction

In an intercultural society, like today's, health professionals have to be aware that a person's cultural background and context conditions, as well as how they perceive the processes involved in health and illnesses,

\* Corresponding author. Tel.: +34-932483932

E-mail address: pgarcimartin@parcdesalutmar.cat

and how this feeds through to their state of health. Cultural competence allows the giving of an adequate response to the necessities of a multicultural population and has become a vehicle that encourages an improvement in the quality of health care, reduces inequalities (Osorio & López, 2008; Chun, 2010; Like, 2011), increases the patients' satisfaction, strengthens treatment adherence (Castro & Ruiz, 2009) and improves the communication between patients and professionals (Carrillo, Green, & Betancourt, 1999; Berlin, Nilsson & Tornkvist, 2010).

Cultural competence has been defined as set of knowledge, attitudes, and behaviours applied to policies or programs which impact on a person, organism or system, and which make it capable of working effectively in intercultural contexts (Martínez, Martínez & Calzado, 2006). The first nurse to conceptualize transcultural nursing was Madelaine Leininger (1978), who put forward the Sun Rising Model to illustrate the Theory of Universality and Diversity in Cultural Care. This theory states that just as people have different characteristics related to their cultural context, in the same way forms of care may be different, depending on the cultural context in which they are given (Ibarra & González, 2006.)

The Panel of Experts on Cultural competence of the American Nursing Association (Giger et al, 2007) agree that the definition of cultural competence is having the knowledge, comprehension and abilities related to a cultural group which permits the offering of culturally accepted care. They believe that a health care professional must offer socially acceptable care. They believe that a health care professional has acquired cultural competence when they are aware of their own thoughts, sensations and feelings and they do not allow these factors to influence the care they give. Rather they incorporate their respect for the patient's culture into providing better care. One of the most referred to definitions in the bibliography is that of Campinha-Bacote (2011): they believe that cultural competence is a process in which the health professionals are continuously making an effort to acquire and apply their caring skills building on the family's cultural context, or the individual's or the community's. This process is formed by four dimensions: knowledge, ability, meeting and cultural desire.

There is no doubt that guaranteeing culturally competent care requires training (Pecukonis, Doyle & Bliss, 2008; Artigas & Bennasar, 2009;). This should be included in the study plans for university grade studies for health care professionals (Pecukonis et al, 2008; Hunt, 2009; Powell, 2012). The centre of the question is "what should the contents included in the programs be and what are the most suitable strategies?" The cultural competence training programs are primarily aimed at increasing the cultural awareness, and not so much in acquiring knowledge and abilities, as cultural awareness leads the carers to go on to acquire the knowledge and abilities necessary to provoke them to change their individual behavior, and also enable them to do so, and this is reflected in the patient and professional health worker interaction (Chipps, Simpson & Brysiewicz, 2008; Serra et al, 2013). Gray & Thomas (2006) propose from a more constructivist vision that the carers learning of different cultural groups implies that culture is stable and fixed, not something that may change, and therefore once this knowledge has been taken aboard ongoing learning is not necessary.

The literature revised offers a great deal of variety in terms of training in cultural competence. The time dedicated to training varies from 3 hours (Siraj et al., 2011), some days (Papadopoulos, Tilki, & Ayling, 2008), weeks (Berlin et al, 2010; Elsegood & Papadopoulos, 2011) or months (Levine & Perpetua, 2006) and may be transversal in pre-university studies (Kardong-Edgren et al, 2010). Among the authors who explicitly state if the training is imparted in pre-university studies or postgraduate, the majority recommend it be in pre-university (Pecukonis, et al 2008; Chun, 2010; Comer, Whichello & Neubrander, 2013). Only Like (2011) is in favor of training from before university and through into postgraduate. There are programs intended only for doctors (Like, 2011; Siraj et al, 2011), only for nurses (Smith, 2001; Levine & Perpetua, 2006; Berlin et al, 2010; Xu et al, 2010), and other programs which are interdisciplinary (Taylor-Ritzler et al, 2008; Muñoz et al, 2009). Some authors specify which model should be used to design and make the training effective; the Campinha-Bacote model is the most commonly used (Muñoz, DoBroka & Mohammad, 2009; Berlin et al, 2010; Kardong-Edgren et al, 2010); other authors use their own model (Papadopoulos, et al., 2008; Elsegood & Papadopoulos, 2011), although the majority do not in fact specify if they have used any model at all.

There are various instruments used to evaluate the efficiency of the training. Among the best known are the TACCT (Chun, 2010), the CCTQ-PRE and POST (Krajic & Strabmayr, 2004; Berlin, Nilsson & Tornkvist, 2010; Serra et al., 2013). The majority use instruments designed by the authors themselves (Papadopoulos, et al., 2008; Xu et al, 2010; Comer et al., 2013).

Another aspect giving rise to debate is what type of concepts or dimensions should guide the training. In general all authors (Chipps et al, 2008; Berlin et al, 2010; Kardong-Edgren et al, 2010; Like, 2011; Papadopoulos, et al., 2008; Pecukonis et al, 2008; Xu et al, 2010; Siraj et al., 2011) believe that in cultural awareness the first dimension to be developed, or overcome, should be one's own prejudices: it is the principal concept. The rest of the contents to be worked on depend on how long the programmed training lasts, among other factors.

In addition some authors set out in their articles what type of educational strategies are to be incorporated into their programs; the great majority endorse lectures, conferences, debates, clinical cases and summaries of the day's work throughout the course (Papadopoulos et al., 2008; Elsegood & Papadopoulos, 2011). However, some propose innovative strategies such as the incorporation of the participants' specific objectives (Taylor-Ritzler et al, 2008), or the use of clinical cases with simulated patients (Xu et al, 2010; Like, 2011).

The Graduate Study Plan for Nursing at the Escola Superior d'Infermeria del Mar (ESIM) includes learning goals related to cultural diversity transversally. Our interest in training in this area is motivated by the demand of the professionals themselves to obtain the nursing qualification defined by ANECA (ANECA 2004), and the corresponding competences, and to meet the objective of the Group for Research into Cultural Competence (GReCC-ESIM). This will work towards achieving excellence in health care and attention from an integration and humanist focus, in a diverse sociocultural context. Therefore to move towards this, the school offers the subject of Intercultural Competence in Nursing. It is an optional subject, in the third year, and with 5 ECTS credits (table 1)

Table 1. Design of the subject of Cultural competence		
Learning Objectives	Educational strategies	Evaluation
Become aware of the cultural identity and cultural prejudices, stereotypes, prejudices and racism	Individual and group analysis based on recommended readings	End of course written piece on integration, tutored over the term:
To acquire understanding of people from different cultures and their vision of the world: the characteristics of the process of migration, health problems of minority groups	Three sessions with experts in: Integration policies, institutional cultural competence and cultural coming together	In the year 2011/12 the evaluation consisted of developing a clinical case and then analyzing it in relation to the objectives of the subject
	Case studies	The year 2012/13: develop a theoretical framework on the theme
Develop strategies and culturally appropriate intervention techniques: communication in intercultural meetings (when nurse and patient are of different cultures)	Debate sessions	related to the objectives of the subject

# 2. Aims

Evaluate the impact and benefits of the training in the acquisition of cultural competence by the students of the Nursing studies at the ESIM.

# 3. Methods

This is a quasi-experimental study with a pretest and post-test design at just one group. To collect this data efficiently we designed a unique questionnaire *ad hoc* with 16 affirmations with answers on the Likert scale, 4 levels: I very much agree (value 1), I agree (value 2), I disagree (value 3), and I disagree strongly (value 4). The lowest value indicates the highest competence in the dimensions gathered together in the questionnaire, except in one of the affirmations, expressed negatively (S3). Responding to the questionnaire was an activity properly forming part of the subject. The students were informed of the purpose of the study, that the data was confidential and that their anonymity was guaranteed. The questionnaire was designed using the Clinical-cultural version of the

competence pre-questionnaire (CCCTQ-PRE) (Krajic et al, 2004). Our questionnaire contemplates the 4 dimensions proposed by Krajic et al, reducing the number of affirmations to 16: knowledge (5 items), abilities (5 items), sensitivity (4 items) and becoming conscious / aware (2 items) [see figure 1]. The study was carried out at the ESIM, and took in all students enrolled in the optional subject cultural competence during two consecutive academic years, 2011/12 and 2012/13.

# 1. Knowledge

- 1.1. I know and am aware of the socio-cultural characteristics of the diverse ethnic groups
- 1.2. I know and am aware of the difference in terms of health risks and illness processes of the diverse ethnic groups.
- 1.3. I know and am aware of the relevant cultural factors for the health and illnesses of the caring process
- 1.4. I know and am aware of the different traditional medicines (Ayurveda medicine, traditional Chinese medicine, etc.)
- 1.5. I know about the policies for cultural diversity (hospital, ER, first aid center, etc.)

#### 2. Abilities

- 2.1. I gather and am eager for information about the patient's perspective of their own health, illness and the use of alternative therapies
- 2.2. When doing a physical exploration or evaluation I respect the patient's intimacy and take into consideration the patient's cultural standards and norms.
- 2.3. I can establish pacts with respect to the care and treatment taking into account the patient's cultural perspective.
- 2.4. I am happy to use mediators and liaison teams when necessary.
- 2.5. I am realistic when a misunderstanding has happened for cultural reasons and make an apology

# 3. Sensitivity/ and keenness to do it correctly

- 3.1. I am capable of interpreting pain, feeling bad or suffering, taking into account the cultural differences and the way of manifesting these.
- 3.2. I am capable of giving advice on behavior or how practices change related to their cultural beliefs when these affect a person's health.
- 3.3. I am tolerant when patients scorn other patients' ethnic origins.
- 3.4. I am tolerant with the large numbers of relatives who accompany some patients

#### 4. Becoming aware and conscious

- 4.1. I am conscious of the sociocultural aspects of the patients whom I treat.
- 4.2. I am aware of social-cultural aspects of the relatives of those I treat.

Figure 1: Questionnaire

The questionnaire was filled out by the students on his or her own at the start of the subject (pre-test) and at the end (post-test). The age and the gender are recorded as secondary variables to realize a socio-demographic description of each academic year. The qualitative variables are described by a frequency description of each one of the categories, and the quantitative variables are described by the mean, median and standard deviation, according to whether or not they follow a normal description. Due to the characteristics of the data (sample size, and the correlation between the replies before and after receiving the training a non-parametric analysis was carried out. To compare the pre-test results between the two groups we used the Mann-Whitney test. To verify the pretest-post-test results of the two groups, the Wilcoxon test was used. The level of statistical significance chosen was 5%. (p<0,05). The data was analyzed by the statistics packet SPSS 21.

# 4. Findings and Comments

43 questionnaires were collected, 19 from the year 2011/12 and 24 from the year 2012/13. In the year 2011/12, 84,2% of the enrolled students were women and in the year 2012/13, 87,5% were women. As for the age, the median for 2011/12 was 23 years (21-46) and in the year 2012/13, 27 years (20-46).

The pretest results between the two groups shows significant differences between the two items (figure 2). On analyzing the response index for each item it is observed that the scores lower than 1,5 (very much agree or agree) are the items grouped under the abilities dimension, while the scores higher than 2 (strongly disagree or disagree) are those corresponding to the knowledge dimension, which would indicate that the pupils believe they have more abilities than knowledge in terms of cultural competence.

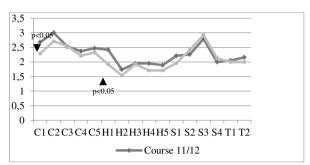


Figure 2: comparison of the pretest replies of the two academic years (expressed as means) C: knowledge; H: abilities; S: sensitivity; T: becoming conscious and aware

On comparing the pretest results with the post-test results after the education received (having attended the course), we can appreciate significant differences in all the items on the scale for both academic years (figure 3). If we observe the distance between each one, the items pre and post, we can see a greater distance in the variables 1, 2, 3 and 5, of the Knowledge dimension, in the variables 1 and 3 of Abilities, in the 2 of Sensitivity, and in all items of *becoming aware/conscious*. This indicates that the most improved areas are knowledge, abilities and *becoming aware/conscious, but less improvement* in Sensitivity.

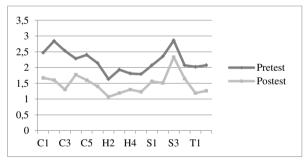


Figure 3: Pretest/post-test results (expressed as a mean for both academic years)

# 5. Discussion

The evidence made available does not allow us to compare the results as they do not use the same dimensions. Just one (Berlin, Nilsson & Tornkvist, 2010) which uses the CCCTQ, allows comparison, except in the cultural desire dimension, which is not included in this questionnaire. As is the case in all of them, all items improve after the education received, but especially in the areas of knowledge, abilities and becoming aware. This improvement, above all in becoming aware, is considered very positive as it indicates that a process of acquiring cultural competence has begun (Chipps, Simpson & Brysiewicz, 2008). The lecturers' emphasis was focused on making the students more aware rather than in acquiring knowledge as it is impossible to know of and understand all about a culture or all the cultures. Furthermore, it could promote the risk of the development of stereotypes (Chun, 2010). However, the cultural knowledge area did improve more than our expectations, maybe due to the education strategies used. In the clinical case we worked on we found cultural meeting, that is to say the nurses learn how to gain cultural information as suggested by Gray & Thomas (2006). The work theme finally chosen was centered on

constructing a conceptual framework. This second strategy is in line with what Taylor et al proposed (2008): that the participants set themselves their own objectives to increase their commitment to learning and the quest for change.

As declared by Pecukonis, Doyle & Bliss (2008), the interdisciplinary training of cultural competence is a way of promoting inter-professional training. However, our Health and Life Sciences campus does not offer interdisciplinary training in this field. Berlin, Nilsson & Tornkvist (2010) propose linking the theoretical and practical training in order to get better results. In our case we do not contemplate bringing in practical experiences the nurses may have really gone through, although this does not mean the exclusion of transversal competencies related to diversity and multiculturalism in the university curriculum.

Some of the articles studied (Davis & Davis, 2010; Waite & Calamaro, 2010) consider that the greatest problem in designing training in cultural competence is the lack of information about whether the teachers themselves who offer it have received education in transcultural nursing. At our center the teachers (those who give the course) have had academic training and moreover have acquired the necessary competence, benefiting from practical experience.

This work has several methodological and design limitations. As for the methodological limitations, firstly and foremostly there is the instrument of measurement used: it is not valid. Moreover, as it is a questionnaire, the replies are subject to social desirableness (Comer et al., 2013). Its second limitation is that the sample is small and includes all the population studied. Over the academic year 2011/12 the distribution and gathering in of the questionnaires was made effective through the teachers giving the course, and this feature meant some questionnaires were lost (19 out of 24 were received, 5 "lost"). To better the successful handing in of questionnaires during the academic year 2012/13, we used the virtual platform of the subject, and this meant all questionnaires, from all students enrolled, were received (24/24). The total confidentiality of the data was guaranteed. All safeguards were valid. The design also leads us to be mindful of two limitations: the post-course questionnaire post was answered immediately after finishing the training, which could have conditioned the positive replies. (Comer et al., 2013). As it is an optional subject, chosen by the students, they may have been more highly motivated for this training in cultural competence than with other materials. This could be a limitation.

It is worth pointing out that the study provides us with data shedding light on a field hardly explored: what the students of Nursing Sciences are like in Spain and Catalonia. The results show we can improve our questionnaire and design so as to better diagnose the necessities and changes in the teaching strategy of the subject. Berlin, Nilsson & Tornkvist (2010) state that one of these strategies should be that it is the students themselves who provide the clinical cases, arising out of the clinical practices they have learned from during the course or before and can use to bring forth useful discussion in the classroom during the course.

# 6. Conclusion

The training in Cultural Competence has shown itself to be effective in improving the four dimensions studied: knowledge, abilities, awareness and sensitivity. Even so, continuing our search can lead to greater cultural sensitivity. It is necessary to join together our criteria on the design of the training, and the tools for evaluating the impact of the training on Cultural Competence, taking in both students and professionals. Incorporating this training into the academic curriculums of other disciplines would be beneficial for the health sciences. A final point: we should not forget the important impact of the training on the practical clinic, enhancing the users' satisfaction as well as the effectiveness of the care provided.

# 7. References

ANECA Agencia Nacional de Evaluación de la Calidad y Acreditación (2004). Libro blanco. Título de Grado en Enfermería. Madrid, ANECA. Artigas-Lelong, B., & Bennasar-Veny, M. (2009). La salud en el siglo XXI: El reto de los cuidados multiculturales. Index De Enfermería, 18(1), 42-46.

Berlin, A., Nilsson, G., & Tornkvist, L. (2010). Cultural competence among Swedish child health nurses after specific training: A randomized trial. *Nursing & Health Sciences*, 12(3), 381-391.

- Campinha-Bacote, J. (2011). Delivering patient-centered care in the midst of a cultural conflict: The role of cultural competence. *Online Journal of Issues in Nursing*, 16(2), 5.
- Carrillo, J. E., Green, A. R., & Betancourt, J. R. (1999). Cross-cultural primary care: A patient-based approach. Annals of Internal Medicine, 130(10), 829-834.
- Castro, A., & Ruiz, E. (2009). The effects of nurse practitioner cultural competence on Latina patient satisfaction. *Journal of the American Academy of Nurse Practitioners*, 21(5), 278-286.
- Chipps, J. A., Simpson, B., & Brysiewicz, P. (2008). The effectiveness of cultural-competence training for health professionals in community-based rehabilitation: A systematic review of literature. Worldviews on Evidence-Based Nursing, 5(2), 85-94.
- Chun, M. B. (2010). Pitfalls to avoid when introducing a cultural competency training initiative. *Medical Education*, 44(6), 613-620.
- Comer, L., Whichello, R., & Neubrander, J. (2013). An innovative Master of Science program for the development of culturally competent nursing leaders. *Journal of Cultural Diversity*, 20(2), 89-93.
- Davis, S. P., & Davis, D. D. (2010). Challenges and issues facing the future of nursing education: Implications for ethnic minority faculty and students. *Journal of Cultural Diversity*, 17(4), 122-126.
- Elsegood, K. & Papadopoulos, I. (2011). Transcultural communication in CAMHS: Developing practitioners' awareness with an online cultural competency course. *Child & Adolescent Mental Health*, 16(4), 214-217.
- Giger, J., Davidhizar, R. E., Purnell, L., Harden, J. T., Phillips, J., Strickland, O., & American Academy of Nursing. (2007). American academy of nursing expert panel report: Developing cultural competence to eliminate health disparities in ethnic minorities and other vulnerable populations. *Journal of Transcultural Nursing*, 18(2), 95-102.
- Gray, P., & Thomas, D. J. (2006). Critical reflections on culture in nursing. Journal of Cultural Diversity, 13(2), 76-82.
- Hunt, M. R. (2009). Patient-centered care and cultural practices: Process and criteria for evaluating adaptations of norms and standards in health care institutions. *HEC Forum*, 21(4), 327-339.
- Ibarra Mendoza, T. X., & González, J. S. (2006). Competencia cultural: Una forma humanizada de ofrecer cuidados de enfermería. *Index De Enfermería*, 15(55), 44-48.
- Kardong-Edgren, S., Cason, C. L., Brennan, A. M., Reifsnider, E., Hummel, F., Mancini, M., & Griffin, C. (2010). Cultural competency of graduating BSN nursing students. *Nursing Education Perspectives*, 31(5), 278-285.
- Krajic K, StraBmayr C. Subproject C. (2004). Staff training towards cultural competence. Evaluation report. migrant-friendly hospitals. Retrieved from http://ec.europa.eu/health/ph\_projects/2002/promotion/fp\_promotion\_2002\_annex6\_14\_en pdf.
- Leininger, M. (1978) Transcultural nursing, concepts, theories and practices. New York: Wiley.
- Levine, M. A., & Perpetua, E. M. (2006). International immersion programs in baccalaureate nursing education: Professor and student perspectives. *Journal of Cultural Diversity*, 13(1), 20-26.
- Like, R. C. (2011). Educating clinicians about cultural competence and disparities in health and health care. *The Journal of Continuing Education in the Health Professions*, 31(3), 196-206.
- Martínez, M. F., Martínez, J., & Calzado, V. (2006). La competencia cultural como referente de la diversidad humana en la prestación de servicios y la intervención social. *Intervención Psicosocial*, 15(3), 331-350.
- Muñoz, C. C., DoBroka, C. C., & Mohammad, S. (2009). Development of a multidisciplinary course in cultural competence for nursing and human service professions. *The Journal of Nursing Education*, 48(9), 495-503.
- Osorio-Merchán, M. B., & López Díaz, A. L. (2008). Competencia cultural en salud: Necesidad emergente en un mundo globalizado. *Index De Enfermería*, 17(4), 266-270.
- Papadopoulos, I., Tilki, M., & Ayling, S. (2008). Cultural competence in action for CAMHS: Development of a cultural competence assessment tool and training programme. *Contemporary Nurse*, 28(1-2), 129-140.
- Pecukonis, E., Doyle, O., & Bliss, D. L. (2008). Reducing barriers to interprofessional training: Promoting interprofessional cultural competence. *Journal of Interprofessional Care*, 22(4), 417-428.
- Powell Sears, K. (2012). Improving cultural competence education: The utility of an intersectional framework. *Medical Education*, 46(6), 545-551.
- Serra Galceran M. y cols. (2013) Competencia clínico-cultural: análisis de la capacitación de los profesionales de la salud. *Index Enferm*, 22 (1-2): 16-19.
- Siraj HH, Zamzam R, Ismail J, Mohamad N. (2011). Managing diversity: A 'Must-have' skill for medical students. *Procedia Social and Behavioral Sciences*, 18, 379-383.
- Smith, L. S. (2001). Evaluation of an educational intervention to increase cultural competence among registered nurses. *Journal of Cultural Diversity*, 8(2), 50-63.
- Taylor-Ritzler T, Balcazar F,Dimpfl S, Suarez-Balcazar Y, Willis C, Schiff R. (2008). Cultural competence training with organizations serving people with disabilities from diverse cultural backgrounds. *Journal of Vocational Rehabilitation*, 29(2), 77-91.
- Waite, R., & Calamaro, C. J. (2010). Cultural competence: A systemic challenge to nursing education, knowledge exchange, and the knowledge development process. *Perspectives in Psychiatric Care*, 46(1), 74-80.
- Xu, Y., Shen, J., Bolstad, A. L., Covelli, M., & Torpey, M. (2010). Evaluation of an intervention on socio- cultural communication skills of international nurses. *Nursing Economic*\$, 28(6), 386-92.