How to integrate cultural competence in medical curricula: learning from a new medical programme

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Abstract

Cultural competence has been acknowledged as an important skill for providing good quality care to all people regardless of their cultural background and for contributing towards reducing health disparities. Though there are models for training in cultural competence, integrating it in medical curricula has proven to be challenging. This paper presents an example of a course of action and a case of successfully integrating cultural competence in a new international medical programme. The paper also explores suggestions for further development.

Keywords: Cultural competence; medical education; stepladder model

Introduction and background

Teaching cultural competence in medical education has been a challenge for many medical programmes (Hudelson, 2016). Echoing such challenge, Worden and Tiouririne (2018) published their experience entitled "cultural competence and curricular design: learning the hard way" and described how their students had negatively reacted towards the steps to incorporate cultural diversity in medical education. This paper aims to present a different case of a new international medical programme which has successfully integrated cultural competence in medical curriculum and to explore ways for further development. Before presenting this case, let us briefly discuss the need and effectiveness of cultural competence as well as gaps identified in medical education.

Though there are many definitions of cultural competence, in general it refers to knowledge of social and cultural factors that shape illness and health behaviour and relevant actions taken to provide best quality care (Alizadeh and Chavan, 2016; Betancourt et al., 2003). The need for cultural competence in healthcare has been acknowledged and documented in the literature for a number of reasons. Firstly, cultural competence can increase patient satisfaction and enhance a feeling of social integration (Waxler-Morrison, 2007). Secondly, contemporary societies are multicultural and cultural competence can potentially address ethnic minority groups' health needs and reduce health...
disparities (Betancourt et al., 2003). Thirdly, doctors need to be better informed and appreciate that health and illness behaviour are complex phenomena that are shaped by different social and cultural factors; hence, the need to adopt a biopsychosocial approach (Borrell-Carrió, Suchman and Epstein, 2004). Research in the effectiveness of cultural competence training in healthcare shows that cultural competence is associated with positive outcomes. More specifically, Price et al's (2005) systematic review of studies between 1998 and 2003 showed that cultural competence improved patient satisfaction and adherence to therapy. Renzaho et al's (2013) review of studies between 2000 and 2011 showed that relevant training helped clinicians to enhance their knowledge and cultural sensitivity. More recent reviews by Horvat et al (2014) and Alizadeh and Chavan (2016) confirmed the previous reviews by indicating a link between cultural competence and patient satisfaction and adherence to therapy.

Cultural competence should not only be integrated in health care settings but also in medical curricula in order to train and prepare students appropriately for their medical practice, thereby achieving better provision of health care. However, the integration of cultural competence in medical curricula is underdeveloped. Alizadeh and Chavan (2016) identified 18 cultural competence frameworks in the literature. Interestingly, none of these frameworks focused on medical education. In support, a recent survey among medical teachers at the University of Copenhagen showed that 82.4% of the respondents agreed that cultural issues should be incorporated into medical programmes and 70% expressed interested in being trained (Sorensen et al., 2017). Along similar lines, a Delphi study by Hordijk et al (2019) showed that 36 experts in cultural competence suggested a number of competencies needed for enhancing medical students’ training.

Reflecting the research findings above, Hudelson et al (2016) explained that integrating cultural competence in medical curricula has been patchy, while Sorensen et al (2019) further documented this gap by constructing a new instrument, influenced by TACCT (Tool of Assessing Cultural Competence Training), to measure cultural competence in 12 medical programmes across Europe. The instrument consisted of 19 questions organised under three main domains: learning outcomes (curriculum), allocation of resources and structures, support and policies. The answering scale was "Yes, Partly, and No". Based on the answers, the average score for each domain respectively was 1.16, 0.45 and 0.72 with a possible maximum score of 2 and a minimum of 0. The authors concluded that there is a lot of room for improving integration of cultural competence in medical education. Along similar lines, an evaluation of 18 medical programmes in the USA through the TACCT tool showed a large variation of teaching and assessment of cultural competence which resulted in different levels of quality (Jernigan et al., 2016).

Apart from the gaps identified above, integration of cultural competence itself in a medical programme might be a challenge because students might not accept it willingly. For example, Worden and Tiouririne (2018) described how challenging it was to introduce cultural competence through team work vignettes at the University of Virginia School of Medical School. Students were very negative because they took cultural discussion as too personal and understood it as a potential threat to their own perception of their ethnic background. The problem was addressed when the team work vignettes were withdrawn and were substituted with a large group discussion on a more specific topic, such as nutrition and culture.

Having discussed briefly the need for cultural competence and the gaps in medical education, the development of a new medical programme tailored for international students should not leave cultural competence training without careful consideration. The University of Nicosia Medical School in Cyprus joined forces with St George's, University of London to offer a MBBS4 (Bachelor of Medicine Bachelor of Surgery) medical programme for students who already had a first degree. All faculty and staff were trained by St George's, University of London and the programme started in 2011. Having acquired experience and knowledge in medical education, the University of the University of Nicosia Medical School decided to set-up the MD6 programme for international school leavers. As this programme was brand new, the University had enough flexibility with the content and mode of delivery to
structure the pre-clinical years (Year 1 to 4) on the basis of semester courses and introduce Integrated Clinical Practice (ICP) sessions whereby students would have the opportunity to integrate knowledge from a number of previously taught courses or learn clinical and communication skills in small groups of six or seven students. Having in mind the challenges of living in a multi-cultural era with population mobility, the University aimed to prepare medical students to work in such an environment of diversity and contribute towards tackling health disparities. As a result, the University appointed a sociologist who would teach medical sociology and undertake a project for incorporating cultural competence in the new medical curriculum in collaboration with the clinical communication tutors, eventually forming the Cultural Competence Training Team (CCTT).

**Theoretical foundations**

For a successful integration of cultural competence in the new medical programme, the CCTT relied heavily on Betancourt et al’s (2003) definition of cultural competence, Kleinman and Benson’s (2006) ethnographic and explanatory model, and Miller’s (1990) prism of clinical competence. Betancourt et al’s (2003) definition focused on understanding the social and cultural determinants of health and illness behavior, how these determinants interact and what interventions are required in order to provide best care to the patients. Betancourt et al’s definition has informed the actions of the CCTT and the cultural competence project to focus not only on ethnic background but also on any social and cultural factors and the intersection between them. In addition, Betancourt et al’s plea to interventions inspired the CCTT to incorporate cultural competence in skills development sessions and link it more directly with clinical communication.

Let us now describe how the CCTT moved from a definition to a framework for building cultural competence in a medical programme. Kleinman and Bensons’ approach guided the CCTT in that direction. More specifically, Kleinman and Benson explained that cultural competence is a problematic term that lacks the flexibility needed to measure and evaluate its effectiveness largely because it is not something static; rather culture encompasses many aspects in people’s life. Also, people nowadays are exposed to multiple cultures and they do not rely on a single cultural template to form their way of thinking and action. In addition, Kleinman and Benson emphasised that presenting to students or doctors in detail the health profile and cultural practices of specific ethnic groups might cause stereotypes and biases. On this note, Kleinman and Benson (2006, p.1674) suggested two ways of tackling the need of cultural competence in healthcare. First, doctors should be trained in ethnography in order to understand in depth their patient from the patient’s point of view; i.e. engage with their patients and "empathise with the lived experience of patient’s illness". In other words, doctors should be trained in how to explore the patient perspective in depth instead of learning about specific ethnic groups. Second, doctors should rely on the explanatory model and make questions that can touch the depth of the patient’s perspective.

Miller’s prism of clinical competence has also been used for building a framework in which a cultural competence curriculum can operate. It has four levels i.e. knows, knows how, does and teaches. This shows that competence entails knowledge and well mastered skills, which can change trainees’ attitudes in a positive way. Many models of training doctors in cultural competence have placed emphasis on the needs for knowledge, skills and attitudes (Alizadeh and Chavan, 2016; Betancourt et al, 2003). This cultural competence project was informed heavily by Miller’s prism to design a spiral stepladder framework starting from the basic step of transferring knowledge and moving upwards to the application of knowledge and building skills. The design and implementation of the cultural competence project is described below in detail.

**Design and implementation**

On the basis of Kleinman and Benson’s approach, the CCTT used the medical sociology course as the basis for
transferring knowledge and helping students to build some initial skills. Thereafter, the CCTT reduced the content of taught material so that students can appreciate the importance of social and cultural determinants of health and behaviour instead of learning facts about specific populations and provide more opportunities for applying knowledge. To achieve this effectively, the medical sociology course offered in Year 1 was structured in two one-hour interactive lectures and one-hour tutorial per week. The course runs for 12 weeks and each week it covers one of the following topics: Introduction to Sociology and Medical Sociology, Lay Health Beliefs and Illness Behaviour, Chronic Illness Experience, Labelling and Stigma, The Body as Social Entity, Mental Illness, Social Inequalities in Health, Gender and Health, Ethnicity and Illness, Ageing, Death and Dying, Doctor-Patient Relationships.

During lecture one, the basic principles and epidemiological data on a topic are discussed. The second lecture starts with a patient case and students discuss in class. After discussion more principles are presented and towards the end of the lecture, students are asked to apply any relevant principles from the two lectures in order to explain the case. The tutorial takes place the day after and students work in small groups on an extended version of the patient case form lecture two in order to complete two main tasks. First, apply the principles from the two lectures but also any relevant terms from the previous weeks. The purpose here is to encourage students to learn from each other, revise the material and appreciate the importance of intersectionality of social and cultural factors in single realistic cases. This is not about reducing sociology to individual cases but about using individual cases as realistic examples students may encounter in their medical practice. Second, formulate an action plan in relation to how to handle the patient and provide best possible care. Some of the patient cases in tutorials are revisited in Year 3 whereby the same patients now visit students in a simulated consultation (see further below the example of a patient with diabetes).

Year 2 works as the bridge between knowledge in social and cultural determinants and cultural competence skills. Thereafter, in Year 2, within the context of Integrated Clinical Practice (ICP) sessions, students are trained and assessed in clinical communication based on the Cambridge-Calgary model (Silverman, Kurtz and Draper, 2016) covering topics such as history taking, initiating the consultation, consent, confidentiality, structuring the consultation, establishing rapport, empathy, shared decision making, giving information, and closing the consultation.

In Years 3 to 6, students integrate the knowledge they acquired during the medical sociology course with the clinical communication skills they learned during Year 2. For example, in a Year 3 ICP session, students have to communicate effectively with a patient with diabetes, a case study they learnt about and discussed an action plan in a medical sociology tutorial during Year 1. Students have the patient from the same case visiting the GP practice who believes that the evil eye inflicted by someone from the community has caused her blood glucose to go unstable. Students should examine their own beliefs and how these may interfere with the consultation, learn how to work with these beliefs effectively so that they do not bias their practice and duty of care, show awareness of the importance of cultural beliefs, being non-judgmental, listen carefully, explore the patient perspective in depth, show understanding (empathy), give information, taking into account the patient’s perspective, and involve the patient in shared decision making. In the following ICP sessions between Year 3 and Year 6, cultural competence has been integrated in the following topics: biographical disruption and non-adherence (practising empathy), communicating with the elderly (tackling stereotypes), appreciating the impact of culture on expressions of pain (pain history), understanding the meanings of breast across cultures (breast exam), handling stigma and mental illness (breaking bad news), and working with interpreters.

Putting everything together, reflecting Miller’s prism, cultural competence at the University of Nicosia Medical School medical programme has been integrated on the basis of a spiral stepladder as per figure 1. The basic step is the knowledge to be acquired through active learning of the social and cultural determinants of health and behaviour. The stepladder moves on to acquiring the basic skills and demonstrating attitudes through tutorials and clinical
communication sessions and then, at the top step, is the mastering of skills and demonstration of positive attitudes in simulated environments. An important aspect is the spiral nature of the stepladder whereby the first step informs the subsequent ones in the sense that material and skills are repeated or relearned in a different and more applied and complex context.

Following the structural integration of cultural competence in the medical programme, assessment should be carefully considered in order to ensure that students are assessed on the relevant knowledge and skills they have acquired and developed. On this note, cultural competence at the University of Nicosia Medical School is examined in written and practical exams. More specifically, Cultural competence in Year 1 is examined with SBAs (Single-Best Answer) questions, SAQs (Short Answer Questions), a student project and an oral presentation. In addition, echoing Aeder et al's (2007) work on the "Culture OSCE", from Year 3 onwards, cultural competence is examined in OSCEs (Objective Structured Clinical Examinations) which is a thorough and controlled way to examine hand-on skills (Khan et al., 2013).

**Figure 1: the spiral stepladder course for integrating cultural competence in a medical programme.**

**Discussion**

The integration of cultural competence in the new medical programme of the University of Nicosia Medical School has been a successful project as it has been well received by students. More specifically, students have consistently scored the medical sociology course 4.5 out of 5 and particularly praised the practicality and usefulness of tutorials. Students have emphasised that the course has given them the opportunity to work with realistic patient cases early in the programme. The ICP cultural competence sessions have also been evaluated by students with an overall score of 4.94 out of 5 and very positive comments with regard to learning and putting social sciences in practice. The tutors of the session gave qualitative feedback to the CCTT with positive comments, whereas some sessions were peer reviewed resulting in a very positive outcome with minor suggestions. In addition to student and peer feedback, completing Sorensen's et al (2019) questionnaire on the learning outcomes showed that the cultural competence project at the University of Nicosia Medical School resulted in a score of 1.5 out of 2, well above the average of 12 other European medical programmes.
Furthermore, the integration and assessment of cultural competence at the University of Nicosia Medical School was presented at the AMEE (Associate for Medical Education in Europe) conference in 2018 during a workshop. The workshop was fully attended by doctors, nurses, administrators and policy makers. During the first part of the workshop the CCTT presented how cultural competence has been integrated in the curriculum and how it has been assessed in OSCEs. In the second part, the CCTT simulated a cultural competence OSCE station and invited one of the attendees to act as the doctor. A simulated patient and an examiner also participated. At the end of the workshop, the conference organisers handed out an evaluation questionnaire which showed a score of 4.06/5. 29% of the attendees answered that the workshop was very useful and 71% that it was quite useful. During an Erasmus training mobility programme in 2019 at the University of Copenhagen, the cultural competence project was presented in full and generated very positive comments.

The question is what made the cultural competence project at the University of Nicosia Medical School work well for the students and what the challenges are. The cultural competence project has some good educational grounds. First, it aimed at teaching less material and introducing more opportunities for active learning (i.e. discussions, team work, applying knowledge to cases). It has been well documented that active learning helps students understand better and retain information for longer (Freeman et al., 2014). Second, it is spiral in the sense that material learnt in Year 1 is revised again in Years 3 to 6 but in a different and more complex context. Spiral learning is an important approach for enhancing knowledge and understanding (Kang, 2016). Third, learning of cultural competence is not only theoretical and applied but also practical. From Years 3 onwards, it takes place in simulated environments with trained actors who role-play patients on the basis of validated scenarios. Fourth, cultural competence is examined in simulated environments and students end up appreciating its importance more and see its relevance to real medical practice (Khan et al., 2013). Fifth, the cases were not generic cultural specific vignettes but rather focused on specific patients who demonstrated how cultural beliefs and practices had influenced their way of understanding health and disease management. Unlike Worden and Tiouririne’s (2018) case of cultural competence at the University of Virginia, the patient-specific scenarios made it more realistic and encouraged students to discuss the patient, not the culture.

Reflecting on the conceptualisation and implementation of the cultural competence project, there are still some challenges to address. That is, cultural competence needs to be further integrated in the curriculum by incorporating in additional clinical communication and clinical skills sessions. Furthermore, medical teachers and tutors could be trained in cultural competence in ways to diversify the medical curriculum. Along the lines of Hordijk et al’s (2018) findings, another aspect of cultural competence that is lacking is training students in how they can critically reflect on their own values and beliefs and manage to interact with patients effectively in settings where their own values and beliefs are challenged. The CCTT is now preparing a teaching plan on how to achieve this. Moreover, the CCTT is working on an evaluation programme of the cultural competence project by measuring its effectiveness among culturally competent medical students. The programme will evaluate medical students’ cultural competence before and after their immersion into the curriculum by inviting them to complete a situation judgment test based on George’s (2017) approach to the evaluation of diversity education health care service and health educational institutions.

**Conclusion**

In this paper we have discussed the need for integrating cultural competence in medical curricula and presented a case of conceptualising, designing and implementing a cultural competence project in a new international medical programme. Forming a Cultural Competence Training Team and relying on Betancourt’s definition, Kleinman and Benson’s ethnographic and explanatory model and Miller’s prism of clinical competence, the University of Nicosia Medical School MD6 medical programme has successfully integrated cultural competence and assessed it in written
exams and OSCEs. Though there are still challenges with this project and room for further development, we believe that this case can work as a basis or a guide for new medical programmes or programmes which are currently under review for enriching diversity issues in their curriculum.

**Take Home Messages**

- Cultural competence has been acknowledged as an important skill for healthcare professionals
- Integration of cultural competence in medical education has been patchy
- Cultural competence in the medical programme of the University of Nicosia Medical school has been well integrated
- The stepladder model of integrating cultural competence in medical education could be scientifically evaluated

**Notes On Contributors**

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Figure 1. Source: Dr Costas S Constantinou.

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Appendices

None.

Declarations

The author has declared that there are no conflicts of interest.

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