Culturally Competent in Medical Education – European Medical Teachers’ Self-Reported Preparedness and Training Needs to Teach Cultural Competence Topics and to Teach a Diverse Class [version 1]

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Abstract
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Background
Health inequalities related to culture and ethnicity may be reduced by training future health care providers. Medical teachers therefore also need to be culturally competent. The aim of this study was to assess medical teachers’ preparedness and their training needs to teach cultural competence topics and to teach a diverse class.

Methods
A link to an online survey was sent to medical teachers of eleven European institutions. Results were analysed through descriptive analysis and answers to open-ended questions were analysed using qualitative analysis.

Results
968 respondents were included. The majority of respondents felt it was important that cultural competence topics should be incorporated into the medical curriculum. Assessment of skills in cultural competence was found important as well.
Over 60% of all respondents reported to be somewhat or very prepared to teach cultural competence topics like migrant health and disparities. Most respondents felt somewhat or very prepared to teach a diverse class. A high interest in training was expressed on teaching cultural competence topics, specifically on communication-related topics.

Conclusion

This study emphasizes the importance of incorporating cultural issues into the medical curriculum and to train medical teachers according to their needs.

Keywords

medical education, diversity, training needs, cultural competence, diverse class

Corresponding author: Katja Lanting (katjalanting@gmail.com)

Competing interests: No competing interests were disclosed.

Grant information: The author(s) declared that no grants were involved in supporting this work.

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How to cite this article: Lanting K, Dogra N, Hendrickx K et al. Culturally Competent in Medical Education – European Medical Teachers’ Self-Reported Preparedness and Training Needs to Teach Cultural Competence Topics and to Teach a Diverse Class [version 1] MedEdPublish 2019, 8:98 https://doi.org/10.15694/mep.2019.000098.1

First published: 26 Apr 2019, 8:98 https://doi.org/10.15694/mep.2019.000098.1
**Introduction**

Due to global migration, Europe constitutes increasingly more culturally and ethnically diverse populations. Generally, migrants and ethnic minorities are less physically and mentally healthy than the majority population. For example, migrants and ethnic minorities in Europe generally are over-represented in cardiovascular diseases, diabetes and obesity (Meeks et al., 2016), and generally perceive themselves as less healthy than the majority population (Nielsen et al., 2010).

Additionally, migrants and ethnic minorities do not receive the same quality of care as patients from majority populations. Studies on for example, access to home care (Suurmond et al., 2016), patient safety (van Rosse et al., 2015), prognosis after an acute myocardial infarction hospitalisation (Oeffelen, 2014) and optimal treatment (Green et al., 2007), show that health care for migrants and ethnic minorities is less optimal when compared to majority populations. It is believed that communication barriers, including language barriers, play a role, as well as cultural barriers and bias of health care providers. Health care providers generally communicate less effectively with migrants and ethnic minorities (Paternotte, 2015; Meeuwesen, 2006) and show less affective behaviours. While it is generally agreed that cultural competence training can result in better access to and increased quality of care for migrants and ethnic minorities (Horvat, 2014; Tuong, 2014; Beach 2005; Chiarenza 2018), cultural and ethnic diversity is not an integrated part of medical education and cultural diversity training is an under-represented topic in the medical curriculum (Sorensen, 2017a, Paternotte et al., 2014; Smedley et al., 2003; Van Wieringen, 2003).

A study on the status of teaching diversity in North-America (US and Canada) (Dogra et al., 2010) similarly revealed a lack of conceptual clarity, and pointed at the fragmented and variable programs to teach cultural diversity. Faculty and staff support and development with regard to teaching diversity, and ambivalence from both staff and students about the relevance continue to be a challenge as well.

Many organisations concerned with quality of and equity in health care emphasised the need for training of students and health professionals in cultural competence, including the HPH Task Force on Migration, Equity & Diversity; Joint Commission Resources; the Council of Europe; WHO regional office Europe; and the International Organisation for Migration. All urge for more attention for cultural competence topics in medical education.

Cultural competence in medical education is commonly defined as a set of attitudes, knowledge and skills that are necessary for care providers to effectively interact with culturally and ethnically diverse patient populations (Dogra et al., 2016; Seeleman et al., 2009; Betancourt, 2003). It is ultimately meant as the ability to provide effective health care services taking into consideration the individual’s gender, sexual orientation, disability, age and religious, spiritual and cultural beliefs (Council of Europe, 2006). Besides analogue approaches, such as equity (Whitehead et al., 2006), superdiversity (Vertovec, 2007) and intersectionality (Hankivsky et al., 2014), cultural competence is a frequently adopted framework for training programmes (Chiarenza et al., 2018).

To provide medical students with cultural competencies, medical teachers also need to be equipped with competencies to teach these issues to students. We, however, do not know what the state of the art is in Europe.

To fill this gap, the present study was performed investigating European medical teachers’ training needs towards teaching cultural competence topics and teaching a diverse class, involving medical schools in eleven European countries. More specific goals of this study were to identify medical teachers’ opinions on cultural competence topics in medical education, their preparedness to teach cultural competence topics and teaching a diverse class and their training needs regarding teaching cultural competence topics and teaching a diverse class.

This study was part of the Culturally Competent in Medical Education (C2ME) project (2013-2015), which aimed to contribute to the integration of cultural competence teaching in undergraduate medical curricula in Europe (see Suurmond et al., 2015; Sorensen et al., 2017a; Sorensen et al., 2017b; Hudelson et al., 2016; Hordijk, 2018). C2ME was financially supported by Erasmus Life Long Learning Program, with medical schools in 11 European countries participating.

**Methods**

A web-based survey was jointly developed by the team at the Academic Medical Center/University of Amsterdam with input from all the C2ME partners. The items were closely discussed and agreed upon. A small pilot was done among four external people, who were not involved in the C2ME project to check for relevance and clarity.

The questionnaire consisted of 41 items. The items were grouped under five headings: 1. Opinions about cultural competence in health care and medical education (nine items); 2. Preparedness to teach cultural competence topics to
medical students (ten items); 3. Preparedness to teach a diverse classroom (four items); 4. Interest in receiving training (Training needs) on teaching cultural competence topics (ten items); 5. Interest in receiving training on teaching a diverse classroom (four items). The 41 five-point Likert-scale questions were followed by two open-ended questions and eight questions to collect demographic information. A link to the online English-only survey, built using the programme Survey Gizmo, was then sent to the coordinator of each of the 11 institutions involved in the C2ME project. Each coordinator forwarded the survey to the relevant staff at their institution. The selected medical teachers were invited to participate (as a survey respondent) by email. In total, the survey was sent to 5577 medical teachers between January and February 2015. The invitation to participate was accompanied by a cover letter which was translated by each institution to their own language.

After two weeks a reminder was sent to all respondents with a second reminder a further two weeks later. Data collection was stopped a week after the second reminder. The study was approved by the Dutch NVMO Ethical Review Board (NERB, file number 324). The ethical principles for medical research involving human subjects as laid down in the Declaration of Helsinki and adopted by the World Medical Association were followed. Codes were used to designate the respondents to guarantee their anonymity. Each respondent was adequately informed of the aims and methods of the study, and a priori informed consent was obtained from the respondents for their participation in this study.

The results were analysed through descriptive calculations using SPSS 23. Answers to open-ended questions were analysed using qualitative analysis (Miles and Huberman, 2014). Coding was done by reading the text line by line, and a paraphrase or label (a code) was applied to those fragments that were relevant. Open coding (coding that might be relevant from as many different perspectives as possible) as well as some predefined codes (based on the constructs of the questionnaire, e.g. ‘preparedness’ or ‘training needs’) were used. This set of codes was the thematic framework, which was applied to all the texts. A chart was devised with headings and subheadings and for each respondent entries were made.

The number of selected medical teachers differed per institution, for example, the partner in Copenhagen sent an invitation to 1400 medical educators whereas the partner in Pécs sent it to 600 and the partner in Edinburgh to 202. The response rate per institution therefore varied as well (see table I).

Results/Analysis
Respondent Characteristics
968 respondents completed the survey, which is a response rate of 17.4%. About half of the group was female (52.9%) and 63.2% of the respondents was aged between 41 and 60 (see table II). The people involved in teaching cultural competence to medical students in this sample were for the most part leaders or senior staff (nearly 74%).

| Name of institution | Participants | Participants in % | Invited People | Response rate (%) |
|---------------------|--------------|-------------------|----------------|------------------|
| 1 University of Geneva | 108          | 12.9              | 457            | 23.6             |
| 2 University of Limerick | 29           | 3.5               | 300            | 9.7              |
| 3 University of Leicester | 20          | 2.4               | 143            | 14.0             |
| 4 University of Edinburgh | 33          | 3.9               | 202            | 16.3             |
| 5 University of Giessen | 14           | 1.7               | 220            | 6.4              |
| 6 VU University Medical Center Amsterdam | 68       | 8.1               | 196            | 34.7             |
| 7 University of Copenhagen | 199        | 23.7              | 1400           | 14.2             |
| 8 University of Antwerp | 44           | 5.2               | 467            | 9.4              |
| 9 AMC/University of Amsterdam | 131       | 15.6              | 739            | 17.7             |
| 10 University of Bergen or Oslo and Akershus University College | 23       | 2.7               | 175            | 13.1             |
| 11 University of Pécs | 100          | 11.9              | 600            | 16.7             |
| 12 University of Sevilla | 71           | 8.5               | 678            | 10.5             |
| Total               | 840          | 100.0             | 5577           | 15.1*            |

*The overall response was 968. As seen in table I, 128 of these 968 people did not report which institution they were affiliated with.
Most respondents were medical doctors (MD), 69.5%. However, the sample included nurses, biomedical scientists, public health professionals and social scientists (6.8% - 9.2%). Many respondents participated in teaching clinical skills in simulation context (56.6%), basic/biomedical skills (36.1%), and ward and clinic based teaching (30.7%). 17.4% had completed previous training in cultural competence topics. 12% of the respondents indicated that they belonged to a cultural or ethnic minority group in their country of residence. Within this specific group, more respondents (28.4%) had completed a training in cultural competence topics, compared to 17.4% of the total sample.

Opinions About Cultural Competence in Medical Education
Nearly 90% of all respondents agreed or strongly agreed that ‘Medical education should include training about cultural issues’ (see table III). In the open text it was mentioned that vertical integration of cultural diversity subjects in the curriculum is needed. Several respondents noted that not everyone in their environment is aware of the importance and the relevance of teaching cultural competence.

Various suggestions were made about how to integrate cultural competence in the curriculum: Make it a part of clinical education. With doctors giving their examples of integration. Importantly, not [design it] as a theoretical course.” Another respondent wrote: “Data or at least examples of how cultural competence has an impact on both practice and (ideally) outcomes would be helpful.” Another wrote: “While important to incorporate into ongoing educational activities it needs to be recognized and covered as a distinct module in the curriculum.” And yet another wrote: “Disperse material, cases, news stories et cetera that illustrate the importance of this issue and make it relevant to them -

### Table II. Participants characteristics

| Age (n=873)                         | N | %   |
|-------------------------------------|---|-----|
| <30 years                           | 32| 3.7 |
| 31-40 years                         | 179| 20.5|
| 41-50 years                         | 268| 30.7|
| 51-60 years                         | 284| 32.5|
| >61 years                           | 110| 12.6|
| Gender (n=867)                      |   |     |
| Male                                | 406| 46.6|
| Female                              | 461| 52.9|
| Self-definition cultural or ethnic minority status (n=869) |   |     |
| Yes                                 | 107| 12.3|
| No                                  | 762| 87.7|
| Position (n=869)                    |   |     |
| Head/leading                        | 259| 29.8|
| Senior staff member                 | 469| 54.0|
| Junior staff member                 | 141| 16.2|
| Completed training in cultural competence topics (n=860) |   |     |
| Yes                                 | 150| 17.4|
| No                                  | 710| 82.6|
| Professional background (n=888)     |   |     |
| MD                                  | 617| 69.5|
| Nurse                               | 67 | 7.5 |
| Biomedical scientist                | 82 | 9.2 |
| Public Health                       | 60 | 6.8 |
| Social scientist                    | 65 | 7.3 |
| More than one professional background| 87 | 9.8 |
even those who might not automatically meet it in their daily practice. And training - you do not address this if you don’t feel competent.”

73.4% of respondents agreed or strongly agreed that ‘During medical school students must be assessed for skills in cultural competence’. A respondent reported: “It is a crucial transverse topic: (...) making sure there are questions in the examinations, have training for medical teachers about this topic.”

When asked about cultural competence in one’s own practice, the vast majority of respondents agreed or strongly agreed (92.1%) that ‘Patients look at health problems through their own cultural lens’. When asked, ‘Care providers look at health problems through their own cultural lens’, a smaller proportion (74.1%) agreed or strongly agreed. An even smaller proportion (68.1%) agreed or strongly agreed to the item ‘I view the health system through my own cultural lens’.

37% neither disagreed nor agreed regarding ‘I recognize when my reactions are based on stereotypes’. Slightly more than half (54%) agreed or strongly agreed that they recognized it when one’s reactions were based on stereotypes, yet only 9% disagreed or strongly disagreed. Many respondents suggested that training may help, for example this one: “Making them aware of their own (differences in) thoughts and behaviors in relation to minority/majority patients.”

Preparedness to Teach Cultural Competence Topics
Respondents were relatively well prepared to teach ‘How to explore aspects of the patient’s social context that could have an impact on care’ (64.9%). More than half of the respondents (54.2%) answered that they felt somewhat or very prepared to teach about prejudice and discrimination in health care. Respondents felt less prepared to teach on ‘How to address conflict when there are different cultural views between the care provider and the patient’, less than half of all respondents reported being somewhat or very prepared (46.2%). About half of the respondents felt somewhat prepared or very prepared teaching ‘How to explore students’ perspectives and reflect on how these may influence their future practice’; teaching ‘Disparities in health and health care’; and teaching ‘Migrant health’ (47.5% to 50.1% was found in ascending order).

A respondent said: “Teachers should become more sensitive to this topic in general. The purpose and need for cultural competence should be made very clear”. Another reported: “As a student I would have appreciate it to learn more about different cultural backgrounds and their impact on medical topics. Now I am teaching students and I sometimes feel a bit unprepared when it comes to language problems (or maybe other problems of understanding).”

Preparedness to Teach a Diverse Classroom
63.4% reported being somewhat prepared or very prepared to ‘Teach students from a range of diverse cultural and religious backgrounds’. When asked about preparedness to ‘Examine one’s own cultural biases that may influence one’s
behaviour as a teacher, 63.9% reported being very or somewhat prepared, and 20.7% neither unprepared nor prepared. One respondent wrote: “Teachers should be open to such topics first.”

In the answers to the open-ended questions, remarks were found on teaching a diverse class. A respondent stated: “Using diverse teaching methods such as cinemeducation [=using film in medical education] that facilitate students and teachers operating outside of their own cultural comfort zone.” Other suggestions from respondents included: “To openly discuss the cultural issues with the students.”

- “To mix groups of Hungarian and English or German program students.”

- “Gain experiences in cultural differences more directly (interaction between cultures) and then, with more insight be better prepared. For example; last I had a discussion with a patient about being operated between Christmas and New Year. No problem she said, I don’t celebrate Christmas... Good point!”

Respondents indicated relatively high preparedness on the two neutrally formulated items, in which culture was not mentioned explicitly, regarding teaching a diverse classroom; 84.2% answered being somewhat prepared or very prepared to ‘Engage, motivate and encourage participation among all students when teaching’ and 89.7% felt somewhat prepared or very prepared to ‘Create a safe and open atmosphere for all students when teaching’.

**Interest in Receiving Training on Teaching Cultural Competence Topics**

Respondents indicated high training needs regarding communication issues. For example, 81% reported to feel somewhat interested or very interested in receiving training on ‘How to address conflict which may arise when there are different cultural views between the care provider and the patient’. And 89.7% felt somewhat interested or very interested to receive training on ‘How to prepare students to adapt their communication style to respond to the patient’s needs’. And

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**Table IV. Teachers’ opinion of own preparedness to teach cultural competence topics. Reported in percentage (n)**

| Topic                                                                 | Very unprepared | Somewhat unprepared | Neither unprepared nor prepared | Somewhat prepared | Very prepared |
|-----------------------------------------------------------------------|-----------------|---------------------|---------------------------------|------------------|--------------|
| How to explore the patient’s cultural and religious beliefs that could have an impact on their care *(missing=2)* | 7.9% (76)       | 20.0% (193)         | 21.2% (205)                     | 41.2% (398)      | 9.7% (94)    |
| How to explore aspects of the patient’s social context that could have an impact on care *(missing=4)*          | 3.6% (35)       | 12.9% (124)         | 18.6% (179)                     | 47.5% (458)      | 17.4% (168)  |
| How to work effectively with interpreters *(missing=10)*           | 10.1% (97)      | 17.4% (167)         | 21.7% (208)                     | 34.6% (331)      | 16.2% (155)  |
| About prejudice and discrimination in health care *(missing=8)*    | 4.2% (40)       | 16.0% (154)         | 25.6% (246)                     | 41.3% (396)      | 12.9% (124)  |
| About migrant health (epidemiology, social determinants, access and barriers to care, etc.) *(missing=12)* | 9.3% (89)       | 18.8% (180)         | 21.8% (208)                     | 40.3% (385)      | 9.8% (94)    |
| How to address conflict when there are different cultural views between the care provider and the patient *(missing=17)* | 8.0% (76)       | 23.1% (220)         | 22.7% (216)                     | 36.7% (349)      | 9.5% (90)    |
| How to prepare students to adapt their communication style to respond to the patient’s needs and capabilities *(missing=13)* | 6.2% (59)       | 18.2% (174)         | 20.0% (191)                     | 43.5% (415)      | 12.1% (116)  |
79.3% were somewhat interested or very interested in receiving training on ‘How to help students explore their own perspectives and values and how these may influence their future practice’. 73% of the respondents were somewhat or very interested in receiving training about ‘Prejudice and discrimination in health care’. A low proportion of 64.2% was somewhat or very interested in receiving training on ‘How to work effectively with interpreters’. ‘How to identify the patient’s language and literacy levels’ scored moderate as well; 67.6% was somewhat to very interested in receiving training on this subject. 69% was somewhat or very interested in receiving training about ‘Disparities in health and health care’.

73.3% was somewhat to very interested in receiving training on ‘How to integrate cultural competence topics in the medical curriculum’. An organisation-wide approach was advocated. As one respondent pointed out: “Top down encouragement and support, offer regular refresher courses, peer-to-peer coaching.”

**Interest in Receiving Training on How to Teach a Diverse Classroom**

77.7% of respondents reported to be somewhat interested or very interested in receiving training on ‘How to examine your own cultural biases that may influence your behaviour as a teacher’. Some respondents more specifically reported a need for reflection on bias, when asked: What do you think could be done to encourage and support medical teachers to incorporate cultural competence topics into their teaching activities: “Workshops with focus on cultural differences in teachers own field. Teachers’ own bias in cultural difference”. And yet another wrote: “Initially need facilitated workshops to explore practitioners own cultural bias. Make use of patients’ narrative experiences.”

80.9% of the respondents were somewhat to very interested in receiving training on ‘How to engage, motivate and encourage participation among all students when teaching’, and 79.8% of respondents were somewhat to very interested in receiving training on ‘How to create a safe and open atmosphere for all students when teaching’.

Respondents suggested:

- “Organize workshops for teachers to learn how to address it in daily teaching activities, like how to create a safe and open sphere in class.”

- “1. Increasing the number of students and teachers from other cultures at the University. 2. Promoting participation of students in classes and promoting the activities of culturally diverse teams.”

- “Learn about engagement of students - be open minded towards different views of health, be open towards good relation with all students independent of cultural background.”

- “Engage faculty with different cultural background.”

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**Table V. Teachers’ opinion of own preparedness to teach a diverse class. Reported in percentage (n)**

| | Very unprepared | Somewhat unprepared | Neither unprepared nor prepared | Somewhat prepared | Very prepared |
|---|---|---|---|---|---|
| Teach students from a range of diverse cultural and religious backgrounds *(missing=5)* | 3.4% (33) | 11.7% (113) | 21.5% (207) | 44.7% (430) | 18.7% (180) |
| Examine your own cultural biases that may influence your behaviour as a teacher *(missing=8)* | 2.8% (27) | 12.5% (120) | 20.7% (199) | 48.0% (461) | 15.9% (153) |
| Engage, motivate and encourage participation among all students when teaching *(missing=5)* | .8% (8) | 3.4% (33) | 11.5% (111) | 54.0% (520) | 30.2% (291) |
| Create a safe and open atmosphere for all students when teaching *(missing=7)* | .4% (4) | 1.9% (18) | 8.0% (77) | 49.2% (473) | 40.5% (389) |
Incorporating Cultural Competence Topics

86% of respondents considered it somewhat or very important to ‘Incorporate cultural competence topics into the medical school curriculum’. It was widely advocated that teachers must become aware first of their training needs. A selection of the answers to the open ended question is presented here below:

- “Active discussion on the topic with fellow teachers could make the teachers realize the importance of the problem and to motivate them addressing it.”
- “Somehow encourage their progress from ‘unaware incompetent’ to ‘aware incompetent’ - so that they perceive a learning need on cultural competence. Teachers (and care providers) need to become aware that equitable care is not the same as treating all patients similarly.”
- “Make movies from other countries and cultures on discussion of a case - the same clinical situation - from the doctor and patient perspective. I guess it would be quite an eye opener for people watching.”
- “Create room in the curriculum. Discuss topics re cultural competence in an open atmosphere, use cases, use audiovisual means.”
- “Case presentations. Openness to address cultural and language differences in a multi ethnic work/teaching/caring environment, daring to address these issues on a daily basis also among the caretakers and people

Table VI. Teachers’ interest in receiving training on teaching cultural competence topics. Reported in percentage (n)

| Interest in receiving training on:                                                                 | Very uninterested | Somewhat uninterested | Neither uninterested nor interested | Somewhat interested | Very interested |
|--------------------------------------------------------------------------------------------------|-------------------|-----------------------|-------------------------------------|---------------------|---------------|
| How to explore the patient's cultural and religious beliefs that could have an impact on their care (missing=61) | 1.9% (17)         | 7.2% (65)             | 15.3% (139)                         | 46.4% (421)         | 29.2% (265)   |
| How to explore aspects of the patient's social context that could have an impact on care (missing=56)   | 2.2% (20)         | 6.4% (58)             | 14.4% (131)                         | 48.7% (444)         | 28.4% (259)   |
| How to work effectively with interpreters (missing=58)                                            | 4.4% (40)         | 9.0% (82)             | 22.4% (204)                         | 42.2% (384)         | 22.0% (200)   |
| About prejudice and discrimination in health care (missing=58)                                   | 2.2% (20)         | 6.0% (55)             | 19.2% (175)                         | 43.2% (393)         | 29.3% (267)   |
| About migrant health (epidemiology, social determinants, access and barriers to care, etc.) (missing=58) | 1.9% (17)         | 5.7% (52)             | 18.4% (167)                         | 46.5% (423)         | 27.6% (251)   |
| How to address conflict when there are different cultural views between the care provider and the patient (missing=59) | 1.7% (15)         | 3.9% (35)             | 13.5% (123)                         | 45.1% (410)         | 35.9% (326)   |
| How to prepare students to adapt their communication style to respond to the patient's needs and capabilities (missing=63) | 1.2% (11)         | 4.6% (42)             | 12.7% (115)                         | 42.8% (387)         | 38.7% (350)   |
working there, accept our different ethnicities and backgrounds, also within apparently similar cultural and ethnic groups.”

- “Make use of patients’ narrative experiences.”
- “Train selected, respected clinicians properly first, free them to give presentations, and let them spread the word. This hospital wide campaign should openly be supported by management.”

Discussion
The results of this study showed that most respondents agreed that medical education should include training about cultural issues and that students should be assessed about these issues. Additionally, a majority felt prepared to teach a diverse classroom and to engage all students, as well as to create a safe and open atmosphere. Despite their large preparedness to teach cultural issues to students, respondents indicated high training needs regarding communication issues. These results are in line with small-scale studies outside Europe, that also found that medical teachers have a need for cultural competence training (Berger et al. 2014; Lu et al. 2014; Rollins et al. 2014). However, in our study, medical teachers are prepared to teach about cultural competencies, but articulate at the same time a need for more training. This suggests that the teachers that participated to our study, are generally the teachers that are interested in cultural competencies and in teaching about diversity. One reason for this may lie in ‘conscious incompetence’ (Crandall et al., 2003) of the participating teachers who may feel prepared in teaching cultural diversity to diverse students, but may also be aware of where their incompetence still lies or would they assume blind spots within themselves. Given also the low response rate of this study (17 %) it is well possible that the majority of medical teachers in general have never thought about teaching cultural competencies or may even have strong aversions against it.

Our study has several implications for faculty development programs. Firstly, our results imply that medical schools in Europe should make more effort of conceptualizing and framing cultural diversity. We recommend that medical schools and universities take a responsibility in training all health care educators to teach these issues, but also that cultural competence is a compulsory part of the curriculum, including compulsory assessment (Dogra, 2016), rather than making individual teachers responsible for teaching and assessing. As was reported in our results, it is important to incorporate cultural competence into ongoing educational activities and it needs to be recognised integrally and also covered as a distinct module in the curriculum. The most effective approach to include cultural competence in medical education is in an integral way, top-down, consolidated in institutional policy and supported by deans and heads of departments. As part of the C2ME project, a curriculum scan was performed in eleven European medical faculties, which identified that a key challenge is still to motivate and engage stakeholders (teachers, management etc.) to promote and allocate resources to cultural competence training for teachers and to develop a curriculum that fosters students’ awareness of their own culture without promoting cultural stereotypes (Sorensen et al., 2017a).

### Table VII. Teachers’ interest in receiving training on teaching a diverse classroom. Reported in % (n)

| Task                                                                 | Very uninterested | Somewhat uninterested | Neither uninterested nor interested | Somewhat interested | Very interested |
|----------------------------------------------------------------------|-------------------|-----------------------|-------------------------------------|--------------------|-----------------|
| Teach students from a range of diverse cultural and religious backgrounds (missing=62) | 2.0% (18)         | 6.3% (57)             | 15.5% (140)                         | 44.8% (406)        | 31.5% (285)     |
| Examine your own cultural biases that may influence your behaviour as a teacher (missing=62) | 1.0% (9)          | 6.4% (58)             | 14.9% (135)                         | 42.5% (385)        | 35.2% (319)     |
| Engage, motivate and encourage participation among all students when teaching (missing=63) | .8% (7)           | 3.5% (32)             | 14.8% (134)                         | 38.1% (345)        | 42.8% (387)     |
| Create a safe and open atmosphere for all students when teaching (missing=60) | .7% (6)           | 4.1% (37)             | 15.4% (140)                         | 35.1% (319)        | 44.7% (406)     |
Secondly, our results guide the content of future faculty development programs. An important topic that warrants attention is teaching about discrimination, bias and prejudice. We would suggest that to adequately support medical teachers in teaching these sensitive issues to students, while at the same time preserving a safe and inclusive environment within the classroom, training of medical teachers not only needs to include cultural sensitivity and how to recognize unconscious bias, but also should address how to engage in, sustain, and deepen interracial dialogue on race and racism within their medical schools and universities.

Another important topic that may need to be addressed in faculty development programs is the topic of how to address conflict when there are different cultural or religious views between the care provider and the patient. For example, a lack of training in breaking bad news has been put forward to contribute to a practice of withholding the diagnosis to migrant children with cancer (Pergert & Lutzen, 2012). Other studies also found training gaps in teaching cross-cultural issues (Sturman & Saiepour 2014; Rollins et al., 2014), for example, in providing culturally sensitive end-of-life care, dealing with cross-cultural conflicts relating to diagnosis or treatment and eliciting information about the use of folk healers and/or other alternative practitioners.

Another topic is the medical culture itself with its own values, norms and language and which is often taken for granted. Interestingly, respondents in our study reported a higher percentage of agreement, when asked about the perception of patients, looking at health problems through their own cultural lens, than when asked about the perception of care providers looking at the same issue. This may be explained by the professional attitude that care providers take when encountering health problems, when they attempt to deliver optimal personalized medicine and try to perceive the perspective of the patient. Alternatively, care providers may be more inclined to think that only patients look at health issues through a cultural lens. These results may be highlighted in faculty development programs, for example, by reflecting on one’s own taken for granted values about end-of-life care, breaking bad news, or the use of folk healers and how these values may conflict with patients values, but also how to deliver good care despite these conflicting values.

Faculty development programs should also include teaching a diverse classroom. All medical teachers should be able to include all students regardless of their ethnic, cultural or social background in their teaching. It is generally believed that this inclusive teaching may support medical students from ethnic minority backgrounds in their learning process. There is evidence that medical students from ethnic minority background under-perform when compared with those from the ethnic majority (Woolf et al. 2011) and qualitative research (Woolf et al. 2008) has highlighted the importance of the student-teacher relationship to learning of ethnic minority students and the possible contributory effects of for example stereotyping to their worse performance (Woolf 2008). Medical teachers should increase their awareness to involve all students in their class. A diverse class may be a very highly learning environment, but teachers must be cautious to avoid tokenism, and to promote the inclusion of students with a migrant background, which is not happening per se (Leyerzapf, 2017).

Strengths and Limitations

The C2ME project was the first to identify European medical teachers’ opinions on cultural competence. The survey’s questions were designed following the international literature and conjointly discussed, revised and agreed upon by the international team as part of the EU project C2ME. The combination of close-ended items on preparedness and training needs facilitates comparison, as such this study generates knowledge.

Moreover, the open-ended items provide useful insight in some of the motivations of the responses.

Some limitations must also be noticed. The number of respondents as well as the response rate per institution that were invited to participate varied substantially across institutions. Comparison between institutions is therefore not possible: the samples differ in many aspects such as the topics that the respondents teach and their professional backgrounds. Also, there is variance in the social contexts of the different participating countries and how terms and concepts are applied and understood.

As this was a convenience sample with a relatively low response rate, the results cannot easily be generalised to all European medical educators.

Selection bias may have played a role, as it is thinkable that the group of respondents consisted of those teachers who were already interested in teaching cultural competence topics and teaching a diverse class. While these respondents who were generally experienced and interested in teaching these issues expressed a need for training, we suspect that the majority of the European medical teachers would benefit from faculty development programmes.
We would therefore recommend that European medical teachers should be trained in teaching cultural competence topics and in teaching a diverse class. A framework of competencies developed in a recent Delphi study (Hordijk et al., 2018), can be used, which includes competencies that all medical teachers should possess, such as basic knowledge of ethnic and social determinants of health; skills to teach in a non-judgemental way; and skills to engage, motivate, and encourage participation of all students. These faculty development programs should be of practical nature, consisting of small-group discussions, case presentations and consultations with simulation patients. The lecturing part can be handed over by means of an e-learning with short presentations using sheets with key words. We recommend that faculty development programs are assessed as well as evaluated on a regular basis, in order to assure their quality and to adapt them to specific needs of medical teachers.

**Conclusion**
This study emphasizes the importance of incorporating cultural issues into the medical curriculum and to train medical teachers according to their needs.

**Take Home Messages**
- Most respondents agreed that medical education should include training about cultural issues and that students should be assessed about these issues.
- The majority felt prepared to teach a diverse classroom and to engage all students.
- The most part of respondents were interested in receiving training on teaching cultural competence topics, especially on communication related issues, and, to a somewhat lesser extent, on teaching a diverse class.
- Medical teachers should be trained in teaching cultural competence topics and in teaching a diverse classroom.
- Medical schools in Europe should make more effort of conceptualizing and framing cultural diversity.

**Notes On Contributors**
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**Declarations**
The author has declared that there are no conflicts of interest.

**Ethics Statement**
The study was approved by the Dutch NVMO Ethical Review Board, NERB file number 324.

**External Funding**
This article has not had any External Funding
### Acknowledgments

We owe a word of thanks to Majda Lamkaddem, who provided statistical advice in the onset phase of analysis. For her statistical insight in a later phase, we thank Ailish Hannigan.

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This paper is about educating cultural competence. This is an important topic for medical education, as European countries increasingly constitute of culturally diverse populations. The authors state that in order to improve the generally lower levels of physical and mental health of migrants and ethnic minorities (compared to majority populations), communication barriers, cultural barriers and bias have to be dealt with. The medical curriculum should integrate cultural competences, described as ‘a set of attitudes, knowledge and skills that are necessary for care providers to effectively interact with culturally and ethnically diverse patient populations’. This study was set up to:1. Investigate European medical teachers’ training needs towards teaching cultural competence topics and teaching a diverse class;2. Identify medical teachers’ opinions on cultural competence topics in medical education, their preparedness to teach cultural competence topics and their related training needs.

Results of the web-based survey among medical doctors, nurses and public health professionals in 11 European countries showed that most respondents agreed that medical education should include training about cultural issues. A majority felt prepared to teach on cultural competency and in a diverse classroom. However, respondents also state high training needs regarding communication issues.

This is a interesting and relevant paper for those interested in medical curriculum design and improving cultural competency. Methods and Results are described clearly. One remark on Methods (second paragraph): ‘Each coordinator forwarded the survey to the relevant staff at their institution’. What is ‘relevant staff’ in this context? Teacher who presently teach cultural competency? (this is not yet a very dominant part of the curriculum), teachers who teach communication skills, or other subjects? As this was not explained or operationalized, this choice may have varied strongly per county, influencing the results. This should be mentioned in Limitations.

In addition, the question is to what extent the authors believe that social desirability played a role in answering the questions? Will the respondents vote in favor of including cultural issues in their curriculum, even when this means their own subject will be reduced in teaching
hours? A critical discussion of these answers would have given the Discussion more depth. There is a good Discussion relating the results to previous studies, and discussing implications for the curriculum. In the strengths and limitations, strong points and possible weaknesses of the study, such as a possible selection bias, are discussed. In conclusion, this article is certainly a useful contribution to the field.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 13 May 2019

https://doi.org/10.21956/mep.19808.r29815

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Balakrishnan Nair
Centre for Medical Professional Development and University of Newcastle

This review has been migrated. The reviewer awarded 4 stars out of 5

Thanks for asking me to review this very interesting paper. We live in an era where patients, learners and teachers are from diverse groups. Patients and carers look at health issues through their own cultural lenses. As the authors state migrants have more health issues; unfortunately they have more unmet needs. So this study looking at the attitude and insight of teachers into this area is worthwhile. The only concern is the low response rate. However it is reassuring to note that the majority of respondents agreed this is an important area needing more action, including assessment. I am keen to see translation of this research into action.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 11 May 2019

https://doi.org/10.21956/mep.19808.r29811

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Trevor Gibbs
AMEE

This review has been migrated. The reviewer awarded 4 stars out of 5
An interesting paper written about an important subject. I enjoyed reading this well written paper and certainly learned from the introduction section and the very useful set of references. I was not really surprised by the findings of the survey, although I would have hoped for a better response rate, which might have biased this paper somewhat. This paper provides very important information for those of us who believe that cultural competence should be present in all health professions curricula and as such would be happy to recommend it to all curriculum planners. Of course the next major step is to translate these findings into action - not an easy task.

**Competing Interests:** No conflicts of interest were disclosed.

**Reviewer Report 29 April 2019**

https://doi.org/10.21956/mep.19808.r29812

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P Ravi Shankar  
American International Medical University

This review has been migrated. The reviewer awarded 5 stars out of 5

Thank you for the opportunity to review this interesting manuscript. Cultural competence is becoming increasingly important and doctors should be able to provide care to diverse populations. Teaching cultural competence can be challenging as mentioned in the article. The authors have described their methodology very well. The Results and Discussion have been clearly described. They also have highlighted the strengths and limitations of their study. Learning about and being aware of specific cultural issues while treating a particular patient can be challenging. The issues to be aware of are vast and challenging. In the future, machine learning algorithms could help doctors. This is an important study conducted in multiple European countries. The list of references is comprehensive. All medical educators will find this study of interest.

**Competing Interests:** No conflicts of interest were disclosed.

**Reviewer Report 26 April 2019**

https://doi.org/10.21956/mep.19808.r29814

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Felix Silwimba  
University of Lusaka

This review has been migrated. The reviewer awarded 5 stars out of 5

Cultural competence in medical education for the educators and the medical students. This is a very important item in the provision of quality medical care. This study is relevant and applicable to all regions of the world. They are so many divergent micro cultures within regions, countries and sub regions that influence the health of the people. I agree medical educators should be the forefront of being culturally aware and educated in order to pass on the knowledge to medical students. I recommend this article.

**Competing Interests:** No conflicts of interest were disclosed.