

Curriculum Co-design for Cultural Safety Training of Medical Students in Colombia: Protocol for a Qualitative Study

Abstract. Cultural safety in medical training encourages practitioners, in a culturally congruent way, to acknowledge the validity of their patients' world-views. Lack of cultural safety is linked to ethnic health disparities and ineffective health services. Colombian medical schools currently provide no training in cultural safety. The aim of this qualitative study is to: (i) document the opinions of stakeholders on what a curriculum in cultural safety should teach to medical students; and (ii) use this understanding to co-design a curriculum for cultural safety training of Colombian medical students. Focus groups will explore opinions of traditional medicine users, medical students, and cultural safety experts regarding the content of the curriculum; deliberative dialogue between key cultural safety experts will settle the academic content of the curriculum. The research develops participatory methods in medical education that might be of relevance in other subjects.

Keywords: Cultural safety · Participatory research · Medical education
Colombia · Thematic analysis

1 Introduction

In 1977, the WHO called for collaboration of Western and traditional medicine [1], in its view of Primary Health Care [2] recognising an inextricable relationship between culture and health outcomes. Yet, this international recognition does not guarantee acknowledgment in everyday medical practice [3]. Western physicians continue to receive medical education and to be presented with role models that do not emphasise culture as a positive resource in health outcomes.

Medical education curricula in most Western countries still focus on biomedical content and perspectives, reducing the chances that the next generation of physicians will acquire the skills and mindset to provide culturally congruent health services. This is compounded by differences in cultural background between physicians and their patients that accentuates the shortfalls of Western medical education, hindering accessibility, acceptability, and effectiveness of health services in the intercultural context [4]. At worst, these differences lead to confrontation with, discrimination against, and even harm to patients, with racial/ethnic health disparities as the outcome [5]. In terms of economic impact, the combined cost of these disparities was estimated at \$1.24 trillion between 2003 and 2006 in the US [6].

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There is growing agreement about the need to train medical students to provide culturally congruent services [7, 8]. For instance, the 2015 Standards for Accreditation of Medical Education Programs in Canada [9] call for training on “the basic principles of culturally competent health care” (p. 21) and “the manner in which people of diverse cultures perceive health and illness and respond to various symptoms, diseases, and treatments” (p. 21). Some medical curricula have implemented “cultural competence” training with positive results including reduction of health care disparities [10], increased satisfaction, increased adherence to prescribed treatments [11], a healthier doctor-patient relationship [12], and even improved physiological and biochemical indices of disease [13].

These improvements, notwithstanding, some authors criticize cultural competence as a concern that improves Western service delivery/supply without dialogue about demand, a new form of colonialism [14], leaving the *power* relations between the patient and professional unaffected [15]. The relatively newly popularised concept of “cultural safety” [16] goes beyond cultural competence, insisting that the patients should have an opportunity to “comment on practices and contribute to the achievement of positive health outcomes and experiences” [17]. Cultural safety embraces *dialogue* between patients and physicians to make joint decisions and especially to judge whether the interaction is culturally safe or not [18].

Increasing awareness of cultural safety in medical education would yield the *benefits* of cultural competence, but also acknowledge the power relationships that occur in practice while “accepting the legitimacy of difference and diversity in human behavior and social structure” [17]. Such a shift in practice would facilitate the transition to a more equitable and client-centred provision of health services, simultaneously *reaffirming* the communities’ right to self-determination and providing respectful services free of colonized perspectives.

Multicultural Colombia is an ideal setting for implementing cultural safety in medical training. In the country, the government supports health services *firmly* based on the Western biomedical model. In contrast, up to 40% of the population seek care in traditional medicine [19], creating a care gap between the community expectations and needs, and the physician’s knowledge and skills. Unfortunately, at present Colombian medical schools provide no cultural safety training.

In light of this, the purpose of our study is two-fold: (a) to examine the opinions of several stakeholders on what a curriculum in cultural safety should teach to medical students so they can provide a culturally safe practice when interacting with traditional medicine users in Colombia; and (b) to use this understanding to co-design a curriculum for cultural safety training of Colombian medical students.

2 Research Question

What are the opinions of stakeholders on what a co-designed cultural safety curriculum should teach to medical students so that they can provide culturally safe services in Colombia? In this study, the stakeholders include key-informant traditional medicine users and medical students from Colombia, as well as key cultural safety experts from Colombia and Canada.

3 Methodology

3.1 Research Design

We will use a qualitative research design that uses a sequence of qualitative research methods aimed at producing data “with adequate generalizability, (...) to influence public health programming and clinical work” (p. 417) [20]. The goal of this methodology is to produce relevant knowledge to generate social change of stakeholders, end-users, and their communities.

3.2 Participants

We will invite three different groups of stakeholders: (a) traditional medicine users from the “Seed of life” (Semilla de vida) community organization at Cota, Colombia; (b) senior medical students from *La Sabana* University (Colombia); and (c) cultural safety experts from the Center for Intercultural Medical Studies (CEMI) and the Research Group on Traditional Health Systems (GESTS) in Colombia, as well as from the Participatory Research at McGill (PRAM) and the McGill Institute for Human Development and Well-being (IHDW) in Canada.

According to Israel, a participatory research expert, “building upon prior positive working relationships is a viable strategy for conducting participatory research” (p. 187) [21]. This project is based on previous partnerships between CEMI, GESTS, McGill PRAM and the Seed of Life organization. Collaborating for more than 13 years in participatory initiatives to protect traditional cultures [22, 23], these stakeholders have developed reliable relationships that will facilitate the progress of the project.

3.3 Sampling Strategy

We will use a purposive sample of key informants [24]. The Seed of life organization is comprised of 10 key traditional medicine users and community leaders. They are key informants because they have been recognized by the community as knowledgeable about traditional medicine and also have 20 years of experience working in community-based projects to protect their culture. The 25 medical students that we will invite are former research assistants in community-based intercultural health interventions conducted by CEMI and GESTS. They are key informants because they have experience in community-based interventions aimed at strengthening traditional medicine. Finally, CEMI, GESTS, and McGill PRAM bring together 20 cultural safety experts with

nearly 30 years of experience in intercultural health projects in Latin America, Canada, and Africa. We will mail/email invitations to all these stakeholders to participate in the project.

3.4 Methods for Collecting and Analyzing Data

The qualitative study will have two phases:

Phase One. In this phase, individual self-administered structured qualitative questionnaires and focus group discussions will explore the opinions of the stakeholders on what a co-designed cultural safety curriculum should teach to medical students in order for them to provide culturally safe services in Colombia. The questionnaires will gather individual opinions, enabling us to capture and compare what has been said in public and in private, as is proposed by Green [25]. The stakeholders will complete the questionnaires before participating in the focus groups. The questionnaires will inform the focus group discussion.

Phase one will use inductive semantic thematic analysis following the six steps proposed by Braun and Clarke [26]. With the consent of all participants, we will audio-record, transcribe, de-identify and safely hold the data produced by questionnaires and focus groups. We will invite two end-users (medical students from Colombia) to analyze the transcripts. In participatory research, hiring staff from the community is a way of increasing the ownership of the research process and capacity building [27].

Using AtlasTi V8.0, two research assistants will code the transcripts separately using an inductive approach. Subsequently, they will meet, compare their individual analysis, and create themes and sub-themes. Here, the research assistants will implement two levels of analysis. Firstly, they will look at the quotations and codes within each theme, looking for consistency and internal coherence. Secondly, they will look at the validity of the theme in relation to the data set. Finally, we will generate a visual representation of the themes using a thematic map to display the relationships between themes.

Phase Two. In phase two, two expert panels comprised of cultural safety experts, one in Colombia and one in Canada, will use the results of phase one to decide on the learning goals of the co-designed curriculum. The panels will follow a deliberative dialogue format [28].

Deliberative dialogue is a “a group process that emphasizes transformative discussion and may be informed by research evidence” (p. 1939) [28]. This process has recently received attention in health policy and systems research. Deliberative dialogue supports the use of evidence for decision making by: (i) using evidence as an input for discussions; (ii) providing an opportunity for stakeholders to discuss, contextualize, and determine the meaning of research evidence in light of their real-world experiences; and (iii) equipping decision-makers with decision-relevant knowledge in a format they can use [28].

The expert panels will use formal group facilitation techniques [27] as a way of creating a safe environment to maximize the effectiveness of the meeting. Firstly, we will present the results of phase one, using short and easy to read visual representations of the data. Secondly, we will provide the experts with materials (boards, paper,

post-its, etc.) to work together to decide on the learning goals and academic content of the co-designed curriculum. The objective is to reach a consensus among experts.

We will use Bloom's revised taxonomy of educational objectives [29] as a framework for creating the learning goals. One research assistant will transcribe and organize the proposed learning goals and academic content. We will share the proposed curriculum via email with the experts who will suggest adjustments and give the *final* approval. Finally, we will share the co-designed curriculum with the traditional medicine users and medical students, who will modify and approve the *final* version.

3.5 Rigor

We will follow the strategies for ensuring trustworthiness in qualitative research projects proposed by Shenton [30]. *Credibility* will be assured by adopting validated research methods to gather the data (semi-structured questionnaires, focus groups, deliberative dialogue) and analyze the data (inductive thematic analysis).

The inclusion of different methods to collect data (questionnaires, focus groups, expert panels), stakeholders (traditional medicine users, students, experts) and sites (Colombia and Canada) will ensure good triangulation. Our key informants' universe is comprised of 55 individuals, and we will invite all of them in order to ensure a maximum variation sample. Similarly, we plan to undertake at least two-member checks to ensure that we correctly report what stakeholders want to say. There will be ongoing debriefing sessions with the research team every two months as well as continuous feedback provided by an experts committee in the Department of Family Medicine at McGill University.

Secondly, we will ensure *transferability* by implementing qualitative methods sequentially. In qualitative designs, the combination of different qualitative methods used at various stages of the research project strengthens the external validity of the data, thus helping to shape the opinions of decision makers [20]. Although the *specific* results of this project will not be generalizable to other settings, as traditional medicine is context and culture *specific*, the research design and methods we will employ will be transferable to other settings in Latin America and beyond.

Thirdly, we will ensure *dependability* by providing an in-depth methodological description that will allow researchers to replicate the study in the future. Moreover, we will use "overlapping methods" such as individual qualitative questionnaires and focus groups.

Finally, we will ensure *confirmability* by disclosing the researchers' background and other predispositions that may influence the analysis of the data, as well as by recognizing the limitations of the study.

4 Expected Research Contributions for Theory and Practice

This participatory research project will produce the *first* co-designed curriculum on cultural safety in medical education in Colombia. This curriculum will integrate the perspectives of different stakeholders, such as traditional medicine users, medical students, and cultural safety experts. The curriculum will inform future cultural safety

training in medical and health sciences education. Ultimately, the results of this project will yield evidence to develop participatory methods to co-design medical training programs.

Indirect outcomes include: (1) capacity building: involved stakeholders will learn about cultural safety in medical education, participatory research, and qualitative inquiry; (2) strengthened partnership between stakeholders that will facilitate future projects; and (3) *finally*, given that cultural safety is a new concept to medical education in Colombia, this project will bring awareness of it to academia, thus facilitating its potential acceptance in the future.

Long-term potential *benefits* for stakeholders include enhanced quality of delivery of healthcare services (higher patient satisfaction, improved doctor-patient relationship, increased patient adherence) and reduced health disparities in communities of Colombia. The results of this study will be relevant to Canada and other multicultural settings.

5 Conclusion

The research supports cultural safety in medical education. It will develop participatory methods in medical education that might be of relevance in other subjects. The co-designed curriculum can be used to inform medical education interventions to foster cultural safety skills for medical students, improving quality of health services, and enhancing overall population health.

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References

1. World Health Organization: The Promotion and Development of Traditional Medicine. <http://apps.who.int/medicinedocs/en/d/Js7147e/>. Accessed 30 July 2018
2. World Health Organization: Declaration of Alma-Ata. http://www.who.int/publications/almaata_declaration_en.pdf. Accessed 30 July 2018
3. Williamson, M., Harrison, L.: Providing culturally appropriate care: a literature review. *Int. J. Nurs. Stud.* 47(6), 761–769 (2010). <https://doi.org/10.1016/j.ijnurstu.2009.12.012>
4. Hester, R.J.: The promise and paradox of cultural competence. *HEC Forum* 24(4), 279–291 (2012). <https://doi.org/10.1007/s10730-012-9200-2>
5. Chomat, A.M., Kring, B., Paiz, L.: Approaching maternal health from a decolonized, systemic, and culturally safe approach: case study of the Mayan-indigenous populations of Guatemala. In: *Maternal Death and Pregnancy-Related Morbidity Among Indigenous Women of Mexico and Central America*, 1st edn, pp. 483–511. Springer, Augusta, GE (2018)

6. LaVeist, T., Gaskin, D., Richard, P.: Estimating the economic burden of racial health inequalities in the United States. *Int. J. Heal. Serv.* 41(2), 231–238 (2011). <https://doi.org/10.2190/hs.41.2.c>
7. Liaison Committee on Medical Education: Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the MD Degree. <http://lcme.org/publications/>. Accessed 30 July 2018
8. General Medical Council: Tomorrow's Doctors - Outcomes and Standards for Undergraduate Medical Education. http://www.gmc-uk.org/Tomorrow_s_Doctors_1214.pdf_48905759.pdf. Accessed 30 July 2018
9. Committee on Accreditation of Canadian Medical Schools: Standards for Accreditation of Medical Education Programs Leading to the MD Degree. https://www.afmc.ca/pdf/CACMS_Standards_and_Elements_June_2014_Effective_July2015.pdf. Accessed 30 July 2018
10. Brusin, J.H.: How cultural competency can help reduce health disparities. *Radiol. Technol.* 84(2), 129–147 (2012)
11. Starr, S.S., Wallace, D.C.: Client perceptions of cultural competence of community-based nurses. *J. Community Health Nurs.* 28(2), 57–69 (2011). <https://doi.org/10.1080/07370016.2011.564057>
12. Cai, D.Y.: A concept analysis of cultural competence. *Int. J. Nurs. Sci.* 3(3), 268–273 (2016). <https://doi.org/10.1016/j.ijnss.2016.08.002>
13. Hawthorne, K., Robles, Y., Cannings-John, R., Edwards, A.G.K.: Culturally appropriate health education for type 2 diabetes in ethnic minority groups: a systematic and narrative review of randomized controlled trials. *Diabet. Med.* 27(6), 613–623 (2010). <https://doi.org/10.1111/j.1464-5491.2010.02954.x>
14. Pon, G.: Cultural competency as new racism: an ontology of forgetting. *J. Progress. Hum. Serv.* 20(1), 59–71 (2009). <https://doi.org/10.1080/10428230902871173>
15. Brascoupe, S., Waters, C.: Cultural safety: exploring the applicability of the concept of cultural safety to aboriginal health and community wellness. *J. Aborig. Heal.* 5, 6–41 (2009)
16. Dyck, I., Kearns, R.: Transforming the relations of research: towards culturally safe geographies of health and healing. *Health Place* 1(3), 137–147 (1995). [https://doi.org/10.1016/1353-8292\(95\)00020-M](https://doi.org/10.1016/1353-8292(95)00020-M)
17. Nursing Council of New Zealand: Guidelines for Cultural Safety, the Treaty of Waitangi and Maori Health in Nursing Education and Practice. <http://www.nursingcouncil.org.nz/Publications/Standards-and-guidelines-for-nurses>. Accessed 30 July 2018
18. McEldowney, R., Connor, M.J.: Cultural safety as an ethic of care. *J. Transcult. Nurs.* 22(4), 342–349 (2011). <https://doi.org/10.1177/1043659611414139>
19. World Health Organization: WHO Traditional Medicine Strategy 2002–2005. http://www.wpro.who.int/health_technology/book_who_traditional_medicine_strategy_2002_2005.pdf. Accessed 30 July 2018
20. Groleau, D., Zerkowicz, P., Cabral, I.E.: Enhancing generalizability: moving from an intimate to a political voice. *Qual. Health Res.* 19(3), 416–426 (2009). <https://doi.org/10.1177/1049732308329851>
21. Israel, B.A., Schulz, A.J., Parker, E.A., Becker, A.B.: Review of community-based research: assessing partnership approaches to improve public health. *Annu. Rev. Public Health* 19(1), 173–202 (1998). <https://doi.org/10.1146/annurev.publhealth.19.1.173>
22. Zuluaga, G., Andersson, N.: Initiation rites at menarche and self-reported dysmenorrhoea among indigenous women of the Colombian Amazon: a cross-sectional study. *BMJ Open* 3, e002012 (2013). <https://doi.org/10.1136/bmjopen-2012-002012>

23. Sarmiento, I., Zuluaga, G., Andersson, N.: Traditional medicine used in childbirth and for childhood diarrhoea in Nigeria's Cross River State: interviews with traditional practitioners and a statewide cross-sectional study. *BMJ Open* 6, e010417 (2016). <https://doi.org/10.1136/bmjopen-2015-010417>
24. Marshall, M.N.: Sampling for qualitative research. *Fam. Pract.* 13(6), 522–526 (1996). <https://doi.org/10.1093/fampra/13.6.522>
25. Green, J., Thorogood, N.: *Qualitative Methods for Health Research*, 3rd edn. Sage, London (2014)
26. Braun, V., Clarke, V.: Using thematic analysis in psychology. *Qual. Res. Psychol.* 3(2), 77–101 (2006). <https://doi.org/10.1191/1478088706qp063oa>
27. Salsberg, J., Parry, D., Pluye, P., Macridis, S., Herbert, C.P., Macaulay, A.C.: Successful strategies to engage research partners for translating evidence into action in community health: a critical review. *J. Environ. Public Health* 2015, 1–15 (2015). <https://doi.org/10.1155/2015/191856>
28. Boyko, J.A., Lavis, J.N., Abelson, J., Dobbins, M., Carter, N.: Deliberative dialogues as a mechanism for knowledge translation and exchange in health systems decision-making. *Soc. Sci. Med.* 75(11), 1938–1945 (2012). <https://doi.org/10.1016/j.socscimed.2012.06.016>
29. The Center for Teaching and Learning: Bloom's Taxonomy of Educational Objectives. <https://teaching.uncc.edu/services-programs/teaching-guides/course-design/blooms-educational-objectives>. Accessed 30 July 2018
30. Shenton, A.K.: Strategies for ensuring trustworthiness in qualitative research projects. *Educ. Inf.* 22(2), 63–75 (2004). <https://doi.org/10.3233/EFI-2004-22201>