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A co-designed curriculum for cultural safety training of Colombian health professionals: Sequential-consensual qualitative study
La co-construction d'un programme de formation sur la sécurité culturelle pour les professionnels de la santé colombiens : une étude qualitative séquentielle-consensuelle

Juan Pimentel, Camila Kairuz, Lilia Suárez, Andrés Cañón, Andrés Isaza, Germán Zuluaga, Anne Cockcroft et Neil Andersson

Résumé de l'article

Contexte : Bien que les pratiques traditionnelles et culturelles en matière de santé soient largement utilisées en Colombie, les médecins ne sont pas formés pour faire face aux tensions interculturelles qui peuvent surgir dans le contexte clinique. La sécurité culturelle encourage les praticiens à s'interroger sur les façons dont leur propre culture influence leur pratique clinique et à respecter la culture de leurs patients. Elle exige qu'ils invitent leurs patients de cultures non dominantes à co-concevoir des soins de santé culturellement sûrs. Nous avons co-conçu un programme de formation en sécurité culturelle pour les professionnels de santé colombiens.

Méthodes : Les objectifs d'apprentissage du programme ont été définis sur la base d'une étude qualitative séquentielle-consensuelle. Par le biais de questionnaires semi-structurés et de groupes de discussion, nous avons exploré les opinions d'utilisateurs de la médecine traditionnelle, d'étudiants en médecine et d'experts en santé interculturelle dans le but de définir le contenu du cursus de façon éclairée. Son contenu académique a été finalisé à la suite d'un dialogue délibératif entre les principaux experts en santé interculturelle. Une vérification par les membres a permis de modifier et d'approuver la version finale.

Résultats : Sept utilisateurs de la médecine traditionnelle, six étudiants en médecine et quatre experts en santé interculturelle ont participé à l'étude. Les parties prenantes ont défini cinq objectifs d'apprentissage : (a) pratiques culturellement non sécuritaires : reconnaître les tensions interculturelles et leurs conséquences; (b) prise de conscience culturelle : examiner leurs attitudes, croyances et valeurs, et la manière dont elles façonnent s pratiques professionnelles; (c) humilité culturelle : écouter et apprendre des pratiques traditionnelles des patients; (d) compétence culturelle : décrire les approches pédagogiques actuelles sur la question des tensions interculturelles; et (e) sécurité culturelle : discuter avec les patients pour parvenir à un terrain d'entente sur leur traitement.

Conclusion : Cette étude intègre les perspectives de différentes parties prenantes et propose de nouvelles applications de la sécurité culturelle qui seraient également pertinentes dans d'autres pays. Les chercheurs et les enseignants peuvent utiliser ces résultats pour alimenter des initiatives futures en matière de sécurité culturelle.

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La co-construction d'un programme de formation sur la sécurité culturelle pour les professionnels de la santé colombiens : une étude qualitative séquentielle-consensuelle

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Abstract

Background: Although traditional and cultural health practices are widely used in Colombia, physicians are not trained to address intercultural tensions that arise in clinical practice. Cultural safety encourages practitioners to examine how their own culture shapes their clinical practice and to respect their patients' culture. It requires inviting patients of non-dominant cultures to co-design culturally safe health care. We co-designed a curriculum for cultural safety training of Colombian health professionals.

Methods: A sequential-consensual qualitative study defined the learning objectives of the curriculum. Semi-structured questionnaires and focus groups explored the opinions of traditional medicine users, medical students, and intercultural health experts to inform the content of the curriculum. Deliberative dialogue between key intercultural health experts settled the academic content of the curriculum. A member-checking strategy modified and approved the final version.

Results: Seven traditional medicine users, six medical students, and four intercultural health experts participated in the study. The stakeholders defined five learning objectives: (a) culturally unsafe practices: acknowledge the intercultural tensions and its consequences; (b) cultural awareness: examine their attitudes, beliefs, and values, and how they shape their professional practice; (c) cultural humility: listen and learn from the patients' traditional practices; (d) cultural competence: describe current pedagogical approaches to address intercultural tensions; and (e) cultural safety: discuss with patients to reach an agreement on their treatment.

Conclusion: This study integrated the perspectives of different stakeholders and proposed new applications of cultural safety that are relevant to other countries. Researchers and educators can use these results to inform future cultural safety initiatives.

Résumé

Contexte : Bien que les pratiques traditionnelles et culturelles en matière de santé soient largement utilisées en Colombie, les médecins ne sont pas formés pour faire face aux tensions interculturelles qui peuvent surgir dans le contexte clinique. La sécurité culturelle encourage les praticiens à s'interroger sur les façons dont leur propre culture influence leur pratique clinique et à respecter la culture de leurs patients. Elle exige qu'ils invitent leurs patients de cultures non dominantes à co-concevoir des soins de santé culturellement sûrs. Nous avons co-conçu un programme de formation en sécurité culturelle pour les professionnels de santé colombiens.

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Introduction

Background

In Colombia, government-supported health services rely exclusively on the Western biomedical model. The population, however, comprises Afro-Colombians (including *Raizal* and *Palenqueros*, 11%), Amerindian (4%), *Mestizo* (Indigenous and Spanish mix, 64%), and White (21%),[1] each of these groups with different ways of approaching health and disease. For example, some 40% of the population seek care in traditional and cultural health practices.[2] Health professionals are not trained, however, to interact with non-dominant cultures, and this sometimes leads to confrontation with and discrimination against service users.[3]

There is growing agreement about the need to train medical students to provide health care that is responsive to the cultural characteristics of each setting.[4] Cultural safety training encourages medical students to examine their own culture, experiences, beliefs, and attitudes, consider how these shape clinical practice, and respect their patients' ways of being and knowing.[5] Irihapeti Ramsden described cultural safety[6] in the 1980s in New Zealand in response to the increasing discontent of Māori Indigenous people with the imposition of Western worldviews in government health services. A central concern was that health services were disconnected from the cultural background and traditional practices of the Māori people. Although cultural safety is an evolving concept that lacks a formal definition,[7] it is commonly described as a space "that is spiritually, socially, emotionally and physically safe for people; where there is no assault, challenge or denial of their identity, of who they are, and what they need."(p272)[8]

Cultural safety is an emerging field and scientific evidence on its benefits for health professionals and service users is scarce.[9] Cultural safety education has featured mainly in nursing programs from New Zealand, Australia and, more recently, Canada, and its implementation in medical education is still limited.[10] In other parts of the world, such as in Latin America, cultural safety training is virtually unknown.

Exploratory experience in Colombia

Between 2015 and 2016, we piloted an exploratory training initiative to promote cultural safety among medical students in Cota, Colombia.[11,12] Using a community-based learning approach, the students co-designed with traditional medicine users a five-month intervention to strengthen traditional medicine. Students appreciated learning from or with the community; they enjoyed co-creation and ownership of the training program, and they felt confident when learning through a theoretical framework that was logical and rigorous to them.[12] The trainees reported increased respect for traditional medicine users to provide better healthcare.[11]

The exploratory training was not formally included in the curriculum of the medical school. However, it suggested cultural safety training was feasible and acceptable for Colombian medical students.[11] Without wider agreement of what cultural safety content we should offer medical students in the Colombian context, we co-designed a curriculum that included voices of the communities affected.[13] The purpose of our study was: (a) to collate opinions of traditional medicine users, medical students, and intercultural health experts on what a curriculum in cultural safety should teach to health professionals to enable culturally safe practice in Colombia; and (b) to use this understanding to co-design a curriculum for cultural safety training of Colombian health professionals.

Methods

Research design

A modified sequential-consensual qualitative study set out to answer the question: what academic content should we include in the co-designed cultural safety curriculum? Consensual qualitative research involves multiple people with different view points in the analysis and interpretation of the data[14] and in a sequential design different qualitative methods are used in the course of a study. This approach may enhance the internal and external validity of qualitative results.[15] We published a detailed protocol of the study,[16] and adhered to the Standards for Reporting Qualitative Research in reporting (Appendix A).[17]

Participants and setting

We invited three groups of stakeholders using a purposive sample in each group:[18] (a) 10 traditional medicine users from a community organization in Cota, Colombia; (b) 25 last-year medical students from *La Sabana* University (Colombia); and (c) 20 intercultural health experts from the Center for Intercultural Medical Studies (CEMI) and the Traditional Health Systems Studies Group (GESTS) in Colombia.

Methods for collecting and analyzing data

First phase: We used individual self-administered semi-structured questionnaires and focus groups to explore the

opinions of the participants. Stakeholders completed the questionnaires before participating in the focus groups, and their answers informed the focus group discussion. We audio-recorded and transcribed the focus group discussions, and invited a general physician (CK) to participate in the data analysis that used inductive thematic analysis following the six steps proposed by Braun and Clarke.[19] Using AtlasTi V8.0, two team members (CK and JP) coded the transcripts separately. The coders met to compare analyses and created themes and sub-themes and thematic maps to communicate the results. We included the selected quotes as Appendix B.

Second phase: The intercultural health experts participated in a panel to define the learning goals of the co-designed curriculum. The panel followed a deliberative dialogue format,[20] an approach that assists the use of evidence for decision making.[20] The experts reviewed the results of the two exploratory teaching interventions[11,12] and the evidence from the focus groups in the first phase of this study. They used materials (boards, paper, post-its, pens and markers) to define the learning goals and academic content of the curriculum. We used Bloom's revised taxonomy of educational objectives[21] as a framework for creating the learning goals. We recorded the deliberation of the experts and the lead author transcribed and organized the proposed learning goals and academic content.

According to Birt and colleagues member-checking "addresses the co-constructed nature of knowledge"(p 1802)[22] and confirms, with the study participants, the credibility of results. After the intercultural health expert panel activities, we conducted three member-checking meetings[22] to share the evolving versions of the co-designed curriculum. We shared the co-designed curriculum with the traditional medicine users, medical

students, and experts. The three groups of stakeholders agreed on the final version of the curriculum.

Rigour
We followed the strategies for ensuring trustworthiness in qualitative research projects proposed by Shenton[23] and Patton.[24] We enhanced credibility by adopting validated research methods to collect and analyze the data. The inclusion of different stakeholders and methods to collect data supported good triangulation. We increased dependability by adhering to the Standards for Reporting Qualitative Research, which will allow researchers to replicate the study in the future.

Ethical approval
This study received approval from the Sub-committee for Research of the Faculty of Medicine at *La Sabana* University (approval number: 445) and the Institutional Review Board of the McGill's Faculty of Medicine (approval number A05-B37-17B). Informed consent was obtained from all individual participants included in the study.

Results
Seven traditional medicine users, six medical students, and four intercultural health experts participated in the study (See Table 1 for the characteristics of the study participants and information regarding the focus groups).

Traditional medicine users
Our analysis identified five themes and 21 subthemes (Appendix B and Figure 1). The focus group participants suggested that health professionals should be familiar with basic principles of traditional medicine and self-care, be aware of the consequences of disrespecting traditional medicine users and the benefits of respecting them, and become aware of the reasons why people use traditional medicine.

Table 1. Characteristics of the study participants (n = 17)

Stakeholder	Number of participants	Range of age (years)	Sex (women)	Education level	Range of experience (years)	Number of focus groups
Traditional medicine users – older adults	4	48 - 52	4	University	21 – 30*	1
Traditional medicine users – young adults	3	18 – 21	3	University students	18 – 21*	1
Medical students	6	23 - 27	3	University	1 – 2 †	2 ≠
Intercultural health experts – Colombia ±	4	47 - 59	1	Postgraduate degree	13 – 33 †	1

*Years of experience using traditional medicine
†Years of intercultural health-related work experience
≠ Three medical students participated in each focus group
± All the experts were physicians working in education and research. Three of them were also practicing clinicians.

Principles of traditional medicine: Health professionals should be aware of the principles of Andean traditional medicine. Concepts of *frío* (cold) and *calor* (heat) are foundations of traditional medicine in Colombia. Imbalances of *frío* and *calor* can cause diseases, and warm and cold plants can prevent and treat illnesses. Cultural nosology involves traditional diseases, such as *susto*, *descuaje*, and *pujo*.

> *The principal thing is the concept of hot and cold because they are the basis of many diseases. Moreover, plants play a role there, there are hot plants and cold plants. (Traditional medicine user 6)*

> *Another thing that has to be respected is when people go to see the doctor and they comment that they have […] traditional diseases, like pujo, descuaje, susto. (Traditional medicine user 1)*

Principles of self-care: Traditional medicine practices promote health and well-being, including environmental, social, emotional, and spiritual aspects. In women's health, this includes menstruation, pregnancy, puerperium, and menopause. Menstruation care involves avoiding cold environments, cold food and drinks, and dairy produce, as well as consuming *warm* plant infusions during menstruation. Care of the common cold includes avoiding cold environments, drinking warm plant infusions, and avoiding stopping fever abruptly.

The traditional medicine users described some practices and remedies to manage fever (Appendix B). Traditional care of the digestive system includes uncomplicated diarrhea and taking acidic fruits (daily) or bitter plant infusions (once a week) on an empty stomach. It encompasses nutrition based on locally produced food and drinking infusions of fresh plants to keep the body "fresh and clean." Self-care also involves strengthening social relationships as well as respecting others, the environment, and the spiritual world. The benefits of traditional self-care comprise positive health effects on menstruation pain, pregnancies and births, menopause, and respiratory health, as well as positive effects for families and their communities. For a detailed explanation of these traditional practices, please see Appendix B.

> *[Self-care] is the traditions that we have. It involves me becoming aware that I am responsible for my own health. It is not waiting to be sick to go to see the doctor but becoming aware that I should take care of myself to prevent disease. (Traditional medicine user 7)*

> *[Self-care] involves environmental aspects, social aspects, emotional aspects, spiritual aspects… that is self-care. It does not involve only the physical part, how my organs are, but something more complex. (Traditional medicine user 6)*

Awareness of the consequences of disrespecting traditional medicine: these include patients hiding information from the physician, decreasing their adherence to treatments, feeling that health decisions are imposed on them, reinforcement of stereotypes, and loss of culture. The main consequence is the deterioration of the doctor-patient relationship. Appendix C depicts three stories that the traditional medicine users shared during the focus groups.

> *I didn't go back; my experience generated a distance between doctors and patients. You lose your confidence in [doctors]. (Traditional medicine user 1)*

Acknowledge the benefits of respecting traditional medicine users: respecting traditional medicine users improves the doctor-patient relationship and the quality of healthcare.

> *[If physicians respect traditional medicine users] it will make you want to go to see the doctor more often and not only when you are sick. (Traditional medicine user 2)*

Medical students

The analysis identified three themes and 12 subthemes (Appendix B and Figure 2). The students recommended five learning objectives, provided suggestions for the pedagogical strategy, and suggested that it should acknowledge and address barriers to cultural safety training.

Learning objectives: the curriculum should promote self-awareness among medical students. This involves becoming aware of the flaws and biases of the biomedical model, acknowledging that it is not the only medical system in Colombia, and recognizing themselves as part of an intercultural setting.

> *One important lesson is to be self-aware that what has been taught to us is not the only thing that exists. That there is something else out there. I don't know whether it works or not, but it could work. They would feel better if they are using things from their own culture. (Medical student 5)*

Health professionals should be aware of the benefits of cultural safety such as openness to dialogue with their patients and a better doctor-patient relationship. The students shared some stories to illustrate with examples the benefits of such type of training (see Appendix C), and recommended that health professionals should be able to recognize the 'target population' and the setting where it would be useful for them.

> *If the physician knows about traditional medicine, they will open up to dialogue, while a doctor who rejects traditional medicine will set up a barrier against the patient. (Medical student 4)*

Health professionals should be aware that traditional medicine use is common among their families and friends. This also includes knowing the principles of traditional medicine, such as cold care, cultural nosology, the roots of traditional medicine in Colombia, and the differences between traditional and alternative medicine. Health professionals should explore basic principles of traditional medicine with their patients such as cold and menstruation care, as well as traditional practices for simple and common diseases. Similarly, health professionals should be equipped with tools to safely explore traditional medicine while being aware of quacks.

Pedagogical strategy: the learning strategy should adapt to each cultural context and to the specific needs of each student. The students felt cultural safety training should be mandatory in Colombian medical education. They discouraged standard education formats, suggested innovative learning strategies, and commented on the value of community-based learning for cultural safety training.

> *Traditional medicine is very different in Haiti and in Colombia, for example. Therefore, the model has to be flexible and adaptable to different community settings. (Medical student 3)*

Acknowledge and address barriers: the pedagogical strategy should recognize and address the factors related to the biomedical model that can hinder cultural safety training. Barriers related to traditional medicine included not understanding how traditional medicine works, concerns regarding the effectiveness and safety of traditional medicine, and the idea that traditional medicine is outdated. Medical education barriers included lack of learning opportunities and ethnocentrism of medical education.

Sociocultural factors included urbanization, colonialism, and the Colombian cultural identity.

> *It can be that traditional medicine works, but it is like a 'black box.' We do not understand how it works. Therefore, we disqualify it. (Medical student 5)*

Intercultural health experts
Our analysis identified two themes and 12 subthemes (Appendix B and Figure 3). The experts provided suggestions for the educational strategy and recommended that it should acknowledge and address the difficulties of cultural safety training.

Suggestions for the learning strategy: the strategy should highlight the benefits of cultural safety training through real-life examples and by demonstrating how the training can help address intercultural tensions in clinical practice. It should promote self-awareness and real-life encounters with traditional medicine, not only for medical students but also for general practitioners and specialists. Using a problem-solution structure, the strategy should help health professionals to recognize intercultural tensions in practice.

> *For me, there has to be a problem the student identifies with and feels motivated to solve. This is what leads the student to learning everything (…) If having the problem is the starting point, the student goes to find the solution, it is in seeking the solution where they will learn, that is the key. (Expert 1)*

Acknowledge and address difficulties: the pedagogical strategy should recognize and address factors that hinder cultural safety training such as the hegemony of the Western biomedical model. This involves ethnocentrism, the logic implicit in evidence-based medicine, and the fact that traditional medicine is perceived as an unimportant issue. Also, they highlighted the negative influence of role models who mistreat traditional medicine users; the so-called 'hidden curriculum.'

> *There are things that medical students learn by the 'hidden curriculum.' Because if I go to the hospital, and I see the pediatrician scolding a woman for this thing or the other, what I learn as a medical student is simply to disregard the knowledge, beliefs, and culture of the other, and impose mine. (Expert 4)*

Expert panel
The intercultural health experts examined the thematic maps (Figures 1, 2, and 3), and the results of the previous community-based experiences.[11,12] They suggested five

sequential learning objectives for the co-designed curriculum. In Figures 1, 2, and 3, the themes stem from the center of the graph and the subthemes stem from each of the themes. The subthemes were organized by the intercultural health experts into learning objectives described in colours.
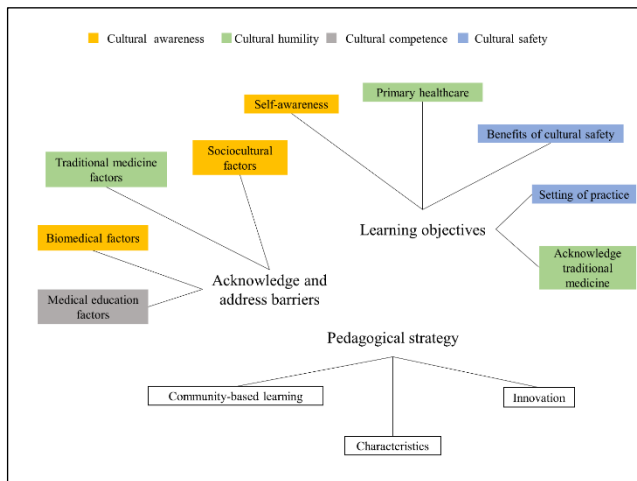

Figure 1. Three themes and 12 subthemes described by the medical students

1) Health professionals acknowledge the intercultural tensions that occur in medical practice and its consequences: this involves making health professionals aware that they are not usually prepared to recognize and handle the intercultural tensions that they face in their daily professional practice, thus disregarding and even confronting patients because of their cultural knowledge and practices. In other words, *surfacing* or *unearthing* the issue of culturally unsafe behaviour.

This objective also comprises making health professionals aware of the consequences of this situation, such as cultural loss, stereotypes, decreased adherence to treatment, poor communication, and an ineffective doctor-patient relationship. Health professionals should feel the need to address intercultural tensions adequately to ensure a sound clinical practice in intercultural settings. The experts termed this stage ***culturally unsafe practices*** (represented in red in the figures).
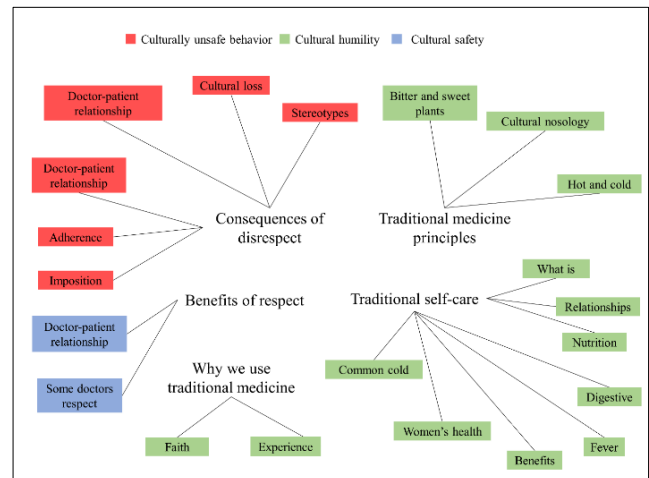

Figure 2. Two themes and 12 subthemes described by the intercultural health experts

2) Health professionals examine their own attitudes, beliefs, and values, and how they shape their professional practice: this self-reflection exercise acknowledges that, just as traditional medicine users have their own culture, so do Western-trained medical doctors. This increases awareness of cultural diversity and that Western medicine is not the only medical system in multicultural settings. Students are part of a multicultural setting, and each clinical encounter is also a cultural encounter. This objective also involves awareness of factors that prevent health professionals from embracing traditional medicine, such as sociocultural factors, biomedical factors, ethnocentrism, and the 'hidden curriculum.' This in turn requires learning about the limitations, flaws, and biases of the Western biomedical model. The experts called this stage ***cultural awareness*** (represented in yellow in the figures).
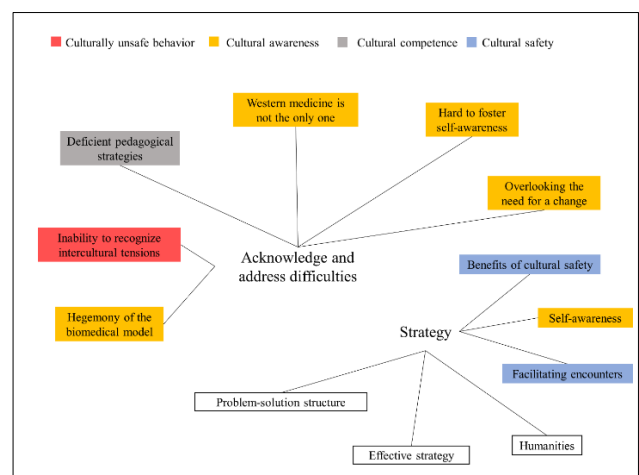

Figure 3. Two themes and 12 subthemes described by the intercultural health experts

3) Health professionals listen and learn from the patients' traditional practices: Health professionals need tools to learn from traditional medicine users. This includes learning basic concepts of Andean traditional medicine, such as traditional self-care, *frío* and *calor,* cultural nosology, and bitter and sweet plants. Professionals should acknowledge that they likely have traditional medicine users among their family members and that traditional medicines and their practitioners can help maintain the health of populations. Finally, health professionals should understand the relationship between traditional medicine and primary healthcare. The experts called this **cultural humility** (represented in green in the figures).

4) Health professionals describe and compare current pedagogical approaches to address intercultural tensions: this involves learning about the existing cultural approaches to solve intercultural tensions, such as cultural competence. Health professionals should learn that the common element of these cultural approaches is respect for the culture of their patients. Respect is an essential element for cultural safety, but cultural safety training goes beyond this. Health professionals will be able to describe the benefits and limitations of these cultural approaches. The experts termed this stage **cultural competence** (represented in grey in the figures).

5) Health professionals discuss practices with patients to reach an agreement, taking into account their medical knowledge and the knowledge of their patients: this involves providing health professionals with tools to identify the setting and target population where cultural safety is more relevant. They should be able to dialogue respectfully with their patients and explore the knowledge, attitudes, and practice related to their cultural background. Through an iterative process, health professionals will gradually learn from their patients and will acknowledge the benefits of cultural safety training, such as respect, openness to dialogue, and a better doctor-patient relationship. The experts called this stage **cultural safety** (represented in blue in the figures).

Pedagogical strategy

The intercultural health experts recommended a process starting with culturally unsafe practices and finishing with cultural safety (Figure 4). This structure will help health professionals to situate themselves within the learning process, thus providing a learning experience that is easier to internalize. The curriculum should follow a problem-solution structure, starting by *surfacing* or *unearthing* the issue of intercultural tensions and its consequences

(culturally unsafe practices), thus motivating health professionals to navigate all the phases to reach the cultural safety level.
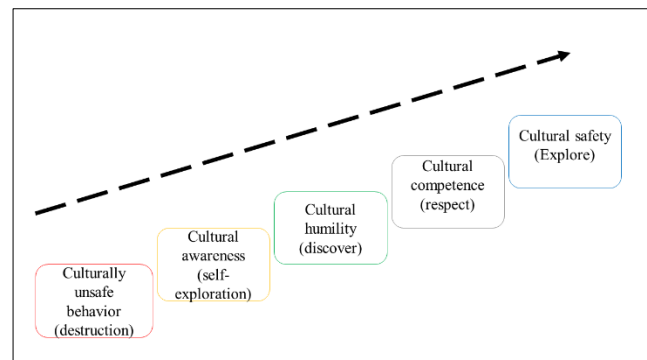

Figure 4. Pedagogical strategy suggested by the intercultural health experts

In three member-checking meetings to share the co-designed curriculum, the traditional medicine users, the medical students, and the Colombian intercultural health experts adjusted and approved the final version of the learning objectives.

Discussion

The study showed curriculum co-design is feasible through a sequential-consensual qualitative study. The work with stakeholders led to five learning objectives for teaching health professionals to provide culturally safe services in Colombia. Other authors have suggested a multi-level or spectrum of standpoints leading up to cultural safety. Ramsden proposed a dynamic process moving from cultural awareness to cultural sensitivity to cultural safety.[25] Wood and Schwass described a model linking culturally unsafe behaviors (cultural risk in their model) and cultural safety.[26] We did not use these models to inform our qualitative analysis, but we note that, like our learning objectives, they indicate a sequential process moving towards cultural safety.[25,26]

In 2019, a randomised controlled trial explored the impact of this curriculum with Colombian medical students and medical interns.[27,28] Both the intervention and control groups received cultural safety training based on our learning objectives and the study reported effectiveness of the training in terms of self-reported intended culturally safe behavior.[28] These preliminary results are encouraging and support the efficacy of our learning objectives, which follow a five-step process beginning with culturally unsafe practices.

Culturally unsafe practices

Culturally unsafe practices have been defined as "any actions which diminish, demean or disempower the cultural identity and wellbeing of an individual".[29] Cooney [30] describes that unsafe clinicians diminish, demean and/or disempower patients from non-dominant cultures, while safe clinicians acknowledge and respect the rights of others. Several systematic reviews have looked at the effects of stereotypes, prejudices or discrimination against minority groups including lower levels of healthcare-related trust, patient satisfaction, adherence to treatment uptake, and delaying or not seeking healthcare. Patients' health outcomes include poor mental health (depression, anxiety, and stress), effects on physical health (hypertension), and poor general health.[31,32] These outcomes can exacerbate health disparities.[33]

Cultural awareness

The Nursing Council of New Zealand recommended including cultural awareness in cultural safety programs.[5] Ramsden[6] suggested that students should reflect on their own 'invisible baggage', which are values and attitudes that influence their clinical practice. In our study, this involves reflecting on how their values, beliefs, and assumptions regarding traditional medicine influence the way they interact with traditional medicine users. Cultural awareness also requires reflecting on ethnocentrism and its attributes including cultural preference, purity, superiority, and exploitativeness.[34] Moreover, cultural awareness requires examining the flaws and biases of the Western biomedical model. As was mentioned by Anne Fadiman, "If you can't see that your own culture has its own set of interests, emotions, and biases, how can you expect to deal successfully with someone else's culture?"[35]

Cultural humility

Once health professionals have reflected on their own cultural identity and the flaws and biases of their own medical system, they will be ready to learn about the cultural health practices of their patients. According to Tervalon "humility is a prerequisite in this process, as the physician abandons the role of expert to the patient, becoming the student of the patient, with a conviction of the patient's potential to be full partner in the therapeutic alliance."[36(p121)] In our study, this involves becoming familiar with basic principles of Andean traditional medicine. Zuluaga & Correal,[37] for example, described four characteristics of traditional medicine in Colombia: (a) triple inheritance (i.e. traditional medicine stems from three types of knowledge systems: Indigenous, African, and ancient European); (b) traditional medicine practitioners (i.e. authentic traditional doctors or shamans, bonesetters, and traditional midwives); (c) traditional concepts of *calor* (hot), *frío* (cold), *limpieza* (cleanse), and *purga* (purge); (d) cultural nosology, meaning traditional diseases such as *descuaje*, *mal de ojo* (evil eye), *frío de difunto* (cold of the deceased), *susto* (fright), among others.

Cultural competence

Although with many interpretations, cultural competence mostly focuses on learning about the culture of the recipient of care -*the other*-. Three systematic reviews report benefits in patients' adherence to treatment, mutual understanding between caregiver and service users, patient satisfaction, and knowledge, attitudes, and skills of medical students.[38–40] Despite the reported benefits, some suggest that cultural competence leads to stereotyping and oversimplification of culture.[41] According to Pon,[42] cultural competence promotes otherizing non-whites by using "modernist and absolutist" views of culture without using a racialist language. Betancourt argues that it "can lead to stereotyping and oversimplification of culture without respect for its complexity."[43(p145)]

Cultural safety

Cultural safety comes after traversing all the previous stages. Our current understanding of cultural safety builds on contributions by Blanchet & Pepin,[13] Bozorgzad,[44] and the Canadian National Aboriginal Health Organization.[45] It encourages health professionals to: (a) examine their own culture and how it impacts service users; (b) recognize the colonial context in which racial/ethnic disparities are created and perpetuated; (c) acknowledge that the cultural and traditional health practice of patients is valid; and (d) work together as a team in the healthcare decision-making process.

The elements provided in the *cultural humility* stage will help health professionals to explore safely basic traditional medicine concepts and practices. As suggested by the medical students, health professionals should carry out this exercise within the scope of primary care (traditional self-care). Regardless of the way health professionals operationalize cultural safety in clinical practice, they must always be reminded that the most important element of cultural safety is that it should be defined and co-constructed by end-users,[13] as in this study.

Limitations

The results of our study may not be generalizable to other settings, as traditional medicine is context/culture-specific. In other settings, where traditional medicine is not as widely used, this approach will be less relevant, and it might be necessary to develop cultural safety interventions through other stigmatizations. The research methods that we employed, however, could be transferable to other settings.

Experts in cross-cultural care research have pointed out that trainees often fall into the social desirability bias (choosing socially desirable answers rather than their thoughts).[46] To reduce this bias, we let trainees know that we wanted them to state the answers they think best reflect their position regarding cultural safety, and stressed that their answers would not have any impact on any grade in any course.

Only intercultural health experts participated in the panel to decide on the learning goals. This could have led to weighting the opinions of the experts over those of the traditional medicine users and medical students. Our member-checking exercise, however, supported the co-constructed nature of the curriculum and confirmed the credibility of the results.

Conclusion

As far as we know, based on our search of the literature, this study produced the first co-designed curriculum on cultural safety in medical education in Latin America. The curriculum integrates the perspectives of different stakeholders, such as traditional medicine users, medical students, and intercultural health experts. Our curriculum explores how to apply cultural safety with non-Indigenous knowledge users by focusing on traditional medicine practices. It starts by acknowledging cultural tensions and highlights the importance of listening to what patients have to say. The process we followed could be relevant for the design and implementation of future cultural safety interventions, offering a participatory framework to co-design cultural safety training programs with inputs from end-users.

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Appendices

Appendix A. Standards for Reporting Qualitative Research (SRQR)[a]

No.	Topic	Item	Page
Title and abstract			
S1	Title	Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	1
S2	Abstract	Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	2
Introduction			
S3	Problem formulation	Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	3 to 5
S4	Purpose or research question	Purpose of the study and specific objectives or questions	5
Methods			
S5	Qualitative approach and research paradigm	Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale[b]	Research design - 5 and 6
S6	Researcher characteristics and reflexivity	Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	Rigour - 9
S7	Context	Setting/site and salient contextual factors; rationale[b]	Participants and setting - 6
S8	Sampling strategy	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale[b]	Participants and setting - 6
S9	Ethical issues pertaining to human subjects	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	Ethical approval - 9
S10	Data collection methods	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale[b]	Methods for collecting and analyzing data – 6 to 8
S11	Data collection instruments and technologies	Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	Methods for collecting and analyzing data – 6 to 8
S12	Units of study	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	Results – Table 1
S13	Data processing	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/deidentification of excerpts	Methods for collecting and analyzing data – 6 to 8
S14	Data analysis	Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale[b]	Methods for collecting and analyzing data – 6 to 8
S15	Techniques to enhance trustworthiness	Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale[b]	Rigour - 8
Results/findings			
S16	Synthesis and interpretation	Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	Results - 9 to 23
S17	Links to empirical data	Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	Appendix
Discussion			
S18	Integration with prior work, implications, transferability, and contribution(s) to the field	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/ generalizability; identification of unique contribution(s) to scholarship in a discipline or field	Discussion 23 to 30

S19	Limitations	Trustworthiness and limitations of findings	Limitations - 31
Other			
S20	Conflicts of interest	Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	Conflicts of interest - 32
S21	Funding	Sources of funding and other support; role of funders in data collection, interpretation, and reporting	Funding - 32

[a] *The authors created the SRQR by searching the literature to identify guidelines, reporting standards, and critical appraisal criteria for qualitative research; reviewing the reference lists of retrieved sources; and contacting experts to gain feedback. The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research.*

[b] *The rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.*

Appendix B. Themes and sub-themes mentioned by the stakeholders

A. Traditional medicine users themes and subthemes

1. Traditional self-care

1.1. What is self-care

<u>Traditions</u> - "It is the traditions that we have. It involves me becoming aware that I am responsible for my own health. It is not waiting to be sick to go to see the doctor, but becoming aware that I should take care of myself to prevent disease."

<u>Complex</u> - "It involves environmental aspects, social aspects, emotional aspects, spiritual aspects… that is self-care. It does not involve only the physical part, how my organs are, but something more complex."

1.2. Women's health

<u>Moments</u> - "It involves taking care of menstruation, pregnancy, puerperium, and menopause."

<u>Menstruation care</u> - "menstruation care involves three days of care. It involves avoiding getting wet, getting cold, dairy, walking bare feet, acidic fruits, cold food and drinks, and exercise"

<u>Hot plants</u> - "there are specific plants that can help... hot plants like *gearanio aromático*, cinnamon*, altamisa*, among others. There is a remedy that you can prepare with *aguardiente* and hot plants."

1.3. Common cold

<u>Care</u> - "it involves five days. But you have to do it for five days, it is very important. You have to avoid getting cold or wet, cold drinks and food, the *sereno*."

<u>Remedies</u> - "you have to drink hot plant infusions, for example, *sauco* and *poleo*. There are remedies for each symptom. For example, nasal congestion, cough, stomach pain, among others."

<u>Avoid stopping</u> - "avoiding stopping the process is a key element. Because if you stop the process, the next cold will be harder. It has an influence on other respiratory illnesses".

1.4. Fever

<u>Beneficial</u> - "it is important to see the fever as a friend, fever is beneficial. But people generally attack the fever."

<u>Bitter plants</u> - "you can manage the fever with plants, especially bitter plants like *verbena* and *sauco* leaves. You can wet a small towel with *sauco* infusion and rub your child. When the children grow up, they can drink *verbena* juice every 15 minutes, or each half an hour, that way you can keep the temperature of the child low, but it does not stop the fever, as drugs do."

1.5. Digestive

<u>Not complicated</u> - "you have to be sure that it is not complicated diarrhea, that is not a bacterium nor that it does not last more than three days for example. When it is not complicated you can use plants, for example, the *yervabuena*. You can prepare a remedy to rehydrate yourself."

<u>Rehydration</u> - "the rehydration remedy is comprised of water, salt, sugar, toasted rice, cinnamon, and other plants."

<u>Orange juice</u> - "We usually have orange juice on an empty stomach. You can also have pineapple, papaya, or carrot juice."

<u>Bitter infusion</u> - "We usually have an infusion of a bitter plant, for example, *verbena* or *ajenjo*, once a week on an empty stomach."

1.6. Nutrition

<u>Local</u> - "Healthy nutrition based on our own food is important, based on what our soil produces, not based on industry."

<u>Avoid junk food</u> - "you have to avoid eating junk and processed food, sodas, food too sweet, fried and canned food, food with colourants or preservatives, all that."

<u>Infusions</u> - "and you can also keep drinking infusions of medicinal plants to keep your body fresh and clean."

1.7. Relationships

<u>Respect</u> - "Plants are living beings; my mom has plants planted at home and she loves them, they are like her pets. Sometimes she asks me to go and bring some plants and she tells us not to do it angrily, you have to sing to them while cutting them. That way you learn to respect other living beings."

<u>Environment</u> - "For me, health has a close relationship with the environment. We have done what we have wanted with the environment and now it is going crazy, now we have started talking about planting trees. So, it is broadening your understanding of health, to include the environment.

<u>Planting plants</u> - "medical students should take into account and value planting medicinal plants."

<u>Spiritual</u> - "self-care also involves the spiritual part, which is not usually taken into account by health providers"

1.8. Benefits

<u>Women</u> - "if you keep the womb warm, you can prevent menstrual pain, prepare your womb for future pregnancies, and also prepare your organs for menopause, to prevent harsh menopause. Also, it helps prevent myomas and cysts; it seems that it is caused by the cold that women who don't take care of their menstruation pick up along their lives".

<u>Respiratory</u> - "if we did this with all children, we would have fewer hospitalizations for pneumonia, bronchitis, bronchiolitis…"

<u>At home</u> - "knowing about self-care prevents people from going to see the doctor over and over again. If I know how to manage an episode of common cold at home, I know what I have to do and I can teach other people about it."

<u>Families</u> - "in our culture, women are important to maintain the health of the families. Therefore, if women take care of their health, they will be strong to help other members of the family if they are sick."

2. Traditional medicine principles

2.1. Hot and cold

<u>Diseases & remedies</u> - "The principal thing is the concept of hot and cold because they are the basis of many diseases. Moreover, plants play a role there, there are hot plants and cold plants."

<u>Examples</u> - "For example, in common cold care, you have to be careful with the cold. Another example, I was told to leave water with chopped limes outside in the *sereno*, to control the heat in my head. If I do not control that I get a migraine. Therefore, it is something fundamental."

2.2. Cultural nosology

<u>Traditional diseases</u> - "Another thing that has to be respected is when people go to see the doctor and they comment that they have diseases that... I don't know how to describe here… like traditional diseases, like *pujo*, *descuaje*, *susto*. I don't know how to describe that."

<u>Example</u> - "The *descuaje*, for example, doctors never accept when a child is *descuajado*. But if the child is rubbered by a bonesetter, he gets well. It does exist."

<u>Example</u> - "Or for example with the *frío de difunto*. I did not know that I was pregnant, and I went to sing in a mass at the cemetery. After that, I started feeling cold. I had to take traditional remedies for nine months so my daughter could be born well, because yes, I could feel the cold."

2.3. Bitter and sweet plants
"Medical students have to learn what bitter and sweet plants are. Therefore, if they understand this concept, they will be able to understand why it is necessary to have an infusion of a bitter plant once a week."

3. Be aware of the consequences of disrespecting traditional medicine

3.1. Patients hide information
"the problem is that a barrier is generated, or also, you don't tell the truth. You have to deceive them. Like, I am going to take the drugs, yes, but then you don't do it."

3.2. Imposition
"they (physicians) have this thought always in mind, they impose their way of thinking. It is as if an alternative doesn't exist. What they believe is correct, is what it has to be done for everybody."

3.3. Stereotypes
Third-class "they (physicians) say that medicine is a third-class thing, it just does not work'"
Poor people - "they (physicians) think that our medicine is what poor people use, because poor people do not have money to buy drugs. So that is why they use plants."

3.4. Culture loss
"(feeling rejected) ends up generating a feeling of protection. Protection for me as a person, because I don't want to clash against them. But also, protection of our medicine, because we know that it really works, but if I start talking about it with the physician, I feel like I am putting traditional medicine at stake, not the medicine itself but my confidence in it."

3.5. Adherence
Option - "I go to the hospital only when there is not another option, for example, to give birth".
Certificate - "I go to the hospital for matters related to my work. Because I need a certificate. Otherwise, I avoid going there."

3.6. Doctor-patient relationship
"I didn't go back; my experience generated a distance between doctors and patients. You lose your confidence in them."

4. Acknowledge the benefits of respecting traditional medicine users

4.1. It improves the doctor-patient relationship
"If physicians can generate a bond with traditional medicine users, they will generate confidence, reconciliation, it will make you want to go to see the doctor and not only when you are sick."

4.2. Some physicians respect traditional medicine
Prudent - "some doctors accept traditional medicine, but they are still just a few. Moreover, they are very careful, very prudent. I think that is because of the health system here in Colombia. They always say, you have to take the drug, and there is also this remedy you could take... they are afraid of labor repercussions."
Inherited - "I think that doctors in Colombia, after all, they do know something about traditional medicine, they have traditional knowledge inherited from their grandparents, but they do not say it."
Example - "once, I got an eye infection and the specialist suggested that I could do calendula baths, and I was like 'really'?"

5. Know why we use traditional medicine

5.1. Learning throughout experience
"I have been using traditional medicine for 20 years, and I can say that it has always helped me."

5.2. Faith
"I think that plants work because I believe in them. If I didn't believe in them, they wouldn't work. It has a relationship with faith (…) But plants are not only about faith. Even if I don't have faith in them, plants have chemical properties."

B. Medical students themes and subthemes

1. Learning objectives

1.1. Self-reflection
Biases - "My daily clinical practice is a jump of faith. I base my practice on guidelines from people that I do not know, I learn those guidelines because I trust those people, I trust that they are doing things well, and they tell me that what they do works. So, I prescribe a drug to a patient, and I expect that drug to work. All my clinical practice is a jump of faith. The reality is that some of those studies are not well done. So, we have to bring all this to intercultural practice because Western medicine is an arrogant system and believes that it is always right, but in practice, it has the same problem that we impose to traditional medicine, the problem of validity."
Something out there - "For me, one important lesson is to be self-aware that what has been taught to us is not the only thing that exists. That there is something else out there. I don't know whether it works or not, but it could work. They would feel better if they are using things from their own culture."
Intercultural setting - "(medical students) have to learn to identify an intercultural setting, and to recognize themselves as part of that environment".

1.2. Benefits of cultural safety
Benefits - "Understanding that there could be a benefit. Understand the benefits of cultural safety training."
Openness - "If the physician knows about traditional medicine, they will open up to dialogue, while a doctor who rejects traditional medicine will set up a barrier against the patient. It will make it harder to know some things from the patient, while in the other case both parties speak the same language".
Relationship - "The most important thing that a medical student must learn is that their clinical practice will be enriched with cultural safety training. If a patient who is also a traditional medicine user come to us, the relationship would be better if the doctor has knowledge of traditional medicine. If they can respect those practices and not put them aside."

1.3. Setting of practice
Target population - "The first thing is that medical students must learn to identify the target population of this type of training."
Particular setting - "If the students have the skills to recognize an intercultural setting, they can also be prepared to learn about the traditional knowledge specific to that particular setting."

1.4. Acknowledge traditional medicine

Their families - "to make the student able to acknowledge that traditional medicine is practiced not only by minorities, rather, even in their families, they will find traditional medicine users, and that should be preserved over time."

Roots - "First, what traditional medicine is. Also, what the roots of traditional medicine are."

Different models - "learning what the difference is between traditional medicine and other models, for example, alternative medicine. We believe that all the models are the same, but they do have differences."

Cultural nosology - "For example, if somebody tells me 'my head is hot,' 'I have *fiebre interna*', 'I am *descuajado'*, then I am prepared for people to tell me that."

Tradition - "Understanding where these concepts come from. When we hear those concepts we always think like, 'that person is talking nonsense". But after learning that those concepts come from an ancient cultural tradition, it changes your perception of it."

Principles - "I learned that the concept of cold care is essential, especially when it comes to women and their menstrual cycle. Therefore, I think it is important that students learn the principles of traditional medicine and how to recognize them."

1.5. Traditional medicine as a type of primary healthcare

Simple diseases - "The meeting point should not be very complex. It is better to have something basic, and start from there… Very simple and prevalent diseases, so people could manage them at home."

Prevention - "I believe that traditional medicine is focused on prevention. Our Western biomedical model is different because it is, sadly, a model based on diagnosis and treatment, and that mindset shapes our education."

Safety - "There is a fundamental issue: safety. It is important to find settings where the students could safely explore traditional medicine… to prevent being irresponsible."

Quacks - "One important aspect is acknowledging that quacks exist, not only for traditional medicine but also for Western medicine, for example, fake plastic surgeons, placebo pills, etc."

More than respect - "for me, the most important thing to learn is respect and tolerance towards intercultural differences. But not only to respect them, rather... I don't know how to say it… like, open our minds to the idea that those concepts that traditional medicine users propose, can be equally valid as those concepts that we know. In other words, not only to respect traditional medicine but to recognize it as valid."

Example - "It is common to find booklets about health promotion and disease prevention in the hospitals, so why can't we include those when, for example, one is about to discharge a patient with bronchiolitis, and we are providing advice? we can provide a booklet with basic advice on cold care. Or, in the case of a woman, advice on menstruation care."

2. Pedagogical strategy

2.1. Characteristics of strategy

Adapted to context - "Culture is very delicate and heterogeneous, the learning strategy must be adapted to each specific population. Traditional medicine is very different in Haiti and in Colombia, for example. Therefore, the model has to be flexible and adaptable to different community settings."

Adapted to needs - "Not all medical students learn the same way. Therefore, the teaching strategy must be adapted to the needs and interests of each student."

Mandatory - "there is a need to include cultural safety as a mandatory course in all medical schools. Not an elective course. It could open the students' mind to a whole new world."

2.2. Innovation

Games - "I love games and I know the potential that they have. Especially for my generation. All my friends play videogames for example. When I am not at the hospital, studying, or with friends, I am playing games. Therefore, I think it is a great opportunity and should be explored."

App - "I am thinking about an app where traditional medicine users and health professionals could exchange information."

Videos - "I liked the videos; I remember that the professors showed videos of traditional medicine users and providers to us. It is not a direct approach, but is good to have sort of an experiential learning."

Arsenal - "If we take into account that cultural safety is not an appealing topic for medical students, it is good to have a good arsenal of different methods and strategies to fit the learning ways of each person."

Not standard - "I don't like, I have never liked, and I will never like to get shut in a classroom to stuff information in us. It has never caught my attention. Never."

2.3. Community-based learning

Exchange - "I think that other medical students should have the same opportunity that we had. Going to Cota, and interacting with the families of traditional medicine users. It opened our eyes. If I had not had that opportunity, perhaps I would not be thinking the same, and perhaps I would discriminate against traditional medicine users."

Interactive- "the lectures were very boring. Like many figures and prevalence of traditional medicine use and that stuff. But when we went to the communities, it was different. You go there, you see the people, talk to traditional medicine users, they show you the plants, you even drink *yoco*... Of course, it was more interesting, more interactive, and then you get attracted to it. You realize that many people use traditional medicine, it could be effective. For me, it is the best way."

Teachers - "I loved the fact that it was the patients themselves who were the ones who taught us about traditional medicine."

Transformative - "When you go there and you live it yourself, you get to know the people, you bond with them, one becomes more empathetic and open, more receptive. In other words, you change a lot when you get to know the people."

3. Acknowledge and address barriers

3.1. Biomedical model factors

The only one - "Because physicians think the Western biomedical model is the only valid one to treat diseases. Therefore, it disqualifies traditional medicine."

Curative focus - "Because traditional medicine has a preventive focus, while Western medicine is focused on diagnosis and treatment. Therefore, our educational mindset is based on diagnosis and treatment and little on prevention and promotion."

Status - "Of course, a physician who has done many degrees would say to the traditional medicine user… 'how are you going to teach me about medicine? I have studied, I have done so many degrees, what are you going to teach me now?'

Technology - "Western medicine goes hand-in-hand with technology, like electronic tools and the use of different machines… while traditional medicine does not go hand-in-hand with technology."

3.2. Traditional medicine factors

Black box - "It can be that traditional medicine works, but it is like a 'black box.' We do not understand how it works. Therefore, we disqualify it. The thing is that we have been studying concepts for around seven years, concepts that are widely described even at the molecular level, and that have something that supports them, therefore, if traditional medicine is described like that, then we reject it."

Effectiveness - "If I said, for example, you can take this *sauco* remedy for respiratory disease, because it has been validated, and has been proven to work… I would accept it, but otherwise, I would not."

Safety - "For one it is hard to try to recommend traditional medicine because we really don't know if it is going to cause harm or benefit, or if it is going to do anything at all, compared to something that has all the scientific evidence (Western medicine)."

Outdated - "We think that (traditional medicine) is what our ancestors used… but it is not valid anymore."

3.3. Medical education factors

Opportunities - "We are privileged in that way because if we compare ourselves with students from other universities, they do not have the opportunity to learn about cultural safety."

Lack of professors - "(cultural safety) is not taught because you cannot teach what you don't know… Therefore, if knowledgeable professors on cultural issues are missing, the students will end up embracing only Western medicine because that is what they learned."

Secondary courses - "when the topic is approached by medical schools, it is only given in secondary courses (*tapahuecos*), and therefore, it is not perceived as a serious topic in medical training."

Ethnocentrism - "Our career is ethnocentric, that is what is sought, that students think that there is no another way to do things, but in practice this is clearly done, for example taking the *sauco*, extracting salicylic acid to make aspirin."

3.4. Sociocultural factors

Identity - "We do not appreciate what we have, we do not love what we have as Colombians. We are privileged to have traditional medicine, and almost all of us have had contact with traditional medicine at least once in life, but we do not know how to appreciate our roots and the history of that knowledge".

Urbanization - "Many students have to go to the big cities to study medicine. People think that they will get a better education in Bogota or Medellin, but in those urbanized settings traditional medicine does not have a place."

Colonialism - "There is a popular phrase that is 'everything in English sounds nicer.' Therefore, everything in English sounds better. We pay more attention to things if they are written in English."

C. Intercultural health experts themes and subthemes

1. Strategy

1.1. Benefits of cultural safety

Example - "Finding real examples, not theoretical, about how this training can be beneficial for both their clinical practice and their patients and communities. It has to be an example of an intercultural conflict in medical practice and how to address it successfully and not only overlook it."

Benefits - "That they have the opportunity of observing and recognizing how the training to deal with intercultural tensions can turn out to be useful and benefit both the patient and themselves and the society."

1.2. Has to promote self-awareness

"The strategy has to promote self-awareness. For example, asking the students to write down diaries, writing about themselves. When they see themselves, they are ready to see the other."

1.3. Facilitating encounters with traditional medicine

Patient - "Another thing that has helped people to assimilate these contents is having personal experience as a patient of traditional medicine, I think that has been fundamental."

GP´s and specialists - "This training should not be only for medical students. General practitioners and specialist require also training in cultural safety."

Encounters - "It is essential to facilitate encounters between the students and traditional medicine. Without this experience, what students learn stays within the theoretical field. I think that it is the ideal pedagogical strategy to teach about this."

1.4. Effective pedagogical strategies

Effectiveness - "Also, there is a need to find pedagogical strategies that have been proven effective. I don't have them right now."

Tensions - "they should be able to recognize all the multiple ways in which intercultural tensions can occur in medical practice; they have to learn to recognize that the tension is always there."

Mistreated - "the strategy has to take into account experiences of people who have been mistreated, who have had encounters with doctors who are not receptive at all, who do not understand their cultural understanding of health and disease."

Framework - "One thing that has helped me is offering a solid and convincing theoretical framework. A big problem linked to talking about traditional medicine is the chaos and confusion that is usually present in the area. Everybody thinks about something different, like homeopathic drugs, flower essences, witchcraft, naturism etc. Therefore, offering a clear and solid theoretical framework has helped me over my 30 years of experience."

1.5. Problem-solution structure

Practice and theory - "From my point of view, from my way to understand pedagogy, practice is before theory. I believe that there is something more practical, more empirical, that make the students interested in the theoretical framework... And the theoretical framework strengthens the learning experience. I experienced it during my masters in education, I used to like the topic, I had my own reflections, I had seen some things in practice, and then I found a theoretical framework that allowed me to understand and interpret all those problems and interests that I had."

Fix problems - "The discourse of science is like, 'we understand everything, we can explain everything, everything is perfect, and the world is like that.' It is the hegemonic discourse. For me, it was motivating when I met a professor who told me that the world has problems, and therefore we have to work, to fix them. As we recognize the problems, think about them, try to address them and solve them, it becomes a motivation. In this case, recognizing the limitations and difficulties of medical science, that is what allows us to investigate and think of new options."

Identified - "For me, there has to be a problem the student identifies with and feels motivated to find the solution. For me, this is what leads the student to learning everything (…) If having the problem is the starting point, the student goes to find the solution, it is in seeking the solution where they will learn, that is the key."

1.6. Humanities

Fiction - "It is about making something that actually happened as it was fiction. It allows the student to connect with that that is fiction, making them want it to be true. When they internalize the message that way, after that, it is easier to show them, 'well it is actually true.' And that is how they link the concepts learned through fiction with real-life problems."

Environment - "Students connect well and easily also with the environmental education that they already have."

Stories - "I use something that I learned from Indigenous people. When I am talking about intercultural health, I am always doing an autobiography. I tell my own story, and I play with it all the time. Of course, it is a magical story, absolutely fascinating, but I use that a lot, for them to believe."

2. Acknowledge and address difficulties

2.1. The hegemony of the Western biomedical model

One way - "We are convinced that there is only one way to see reality, only one culture, only one epistemology."

Neutral - "Western science pretends to be THE science, and the science looks from nowhere. It is neutral."

Ethnocentrism - "We are all taught in some way and we all learn things; we learn them intuitively without criticizing. We learn them as our own, and this is related to ethnocentrism. Therefore, I have a particular way to see the world, and for me, it is the normal way, the right way. This is a barrier for me, it is hard to make the students realize that, that those things that we learn as normal or correct, are not necessarily correct or normal, it is just particular way to see things, but for us, it becomes the normal way to see things."

Evidence-based - "they (the students) have been trained under the evidence-based medicine approach, meaning that this is the only right way to see the world. Therefore, talking to them about worldviews different than EBM is hard."

Anecdotic - "another difficulty that I confront is that they don't see the value of respecting traditional medicine. For them it is more like a folk thing, anecdotic, but they don't necessarily see it as something important."

Deeper issue- "There is a deeper issue. It is stuck in our mind and colonization process that a cultured person is the one that who seems somebody from a 'first-world country.' And being a cultured person means having first-world education, and the Western worldview is within the first-world. In that context, the *maloka* is the pigsty of the uncultured. (...) Traditional medicine is automatically classified as uncultured. For example, an Indian does not usually know how to appreciate modern art or a concert of Mozart, but we don't know how to participate in a *Yuripari*. However, one is cultured, and the other one is uncultured. That makes cultural safety training hard."

2.2. Deficient current pedagogical strategies

Deficient - "current strategies, when they occur, are deficient. At best, what they try to teach is how to trick the patients into doing what they want them to do."

Interest - "no one promotes interest in the real dimensions of the problem."

Processes - "on a more technical level, medical education is more about teaching the names of the muscles, the molecules, or processes, and a big part of the pedagogical strategies are designed for that purpose. But when things have to do with these types of categories (cultural safety), there is a need to resort to other types of strategies."

Hidden curriculum - "There are things that medical students learn by the 'hidden curriculum.' Because if I go to the hospital, and I see the pediatrician scolding a woman for this thing or the other, what I learn as a medical student is simply to disregard the knowledge, beliefs, and culture of the other, and impose mine."

Imitation - "the way they (medical students) learn how to treat traditional medicine users is through imitation. That authority that the pulmonologist has, the admired clinician, and then he receives a woman using a *franela roja* (traditional practice), and then he scolds the woman and says to her 'stop using this nonsense,' then their students will learn that."

2.3. Is hard to foster self-awareness

Failures - "Cultural safety implies that there is something good in non-Western understandings of the world, and that also requires showing the potential biases and failures of Western medicine, showing them that it is not the only truth. That exercise is very uncomfortable for the students, it makes them uncomfortable."

Confronting - "When I aim to recognize the other, the first step is to recognize myself. But that exercise is not always easy or nice, because the students end up confronting themselves, which can generate strong reactions. They can be harsh because the students feel that their ideas and convictions are being attacked, there is a risk to confuse that with a personal attack."

Worldview - "Of course, if I don´t understand that mine is just a worldview, everything that it is not my worldview can easily be rejected."

2.4. Western medicine is not the only one.

"(cultural safety) entails calling attention to the fact that Western medicine is not the only medical system, is not the best, maybe it has biases, it has defects."

2.5. Inability to recognize intercultural tensions.

Thingy - "What happens is that a physician like this, trained within the hegemony of the Western biomedical model, when they see patients wearing amulets against the evil eye, against *descuaje*, what happens is that the physician will scold the patient because the *thingy* will break and the patient will choke and whatnot... So, there is a lack of tools for them to recognize those tensions and how to address them."

Ignorance - "There is a lot of ignorance despite these situations happening all the time. There is an incapacity to acknowledge that… and what they (physicians) do is letting things pass and imposing their prescription, and that is it."

2.6. Not acknowledging the need for a change

"Another barrier is lack of acknowledgement for the need to propose changes to the biomedical model. We all know that the biomedical model is currently in crisis. There are problems. But all we want is to change the system or how the same biomedical model is delivered. Nobody proposes to change the biomedical model."

Appendix C. Stories recounted by the stakeholders

Stories of intercultural tensions recounted by the traditional medicine users

First story

"Regarding the concept of cold, I have a story to tell. When my kid was born at the hospital, a nurse came and forced me to take a shower. I told her that I did not want to take a shower, and she said 'no mom, you must go inside and take a shower.' I decided to enter the bathroom and open the shower so she could hear the sound of the water. She thought I had taken a shower and let me rest. When I finally got home, I could do my traditional remedies.

With my young daughter it was even worse, because I tried to do the same, but the nurse noticed that I was not in the shower -I do not know if they have cameras or something like that-. She yelled at me and asked me to leave the door open. I entered the shower, but I was leaning towards the wall, trying to avoid touching the water, but some drops splashed out on my feet. When I got home, I did my traditional remedies, but on the second day, I got a terrible headache. It was very hard, and I think it was because of the water that splashed out on my feet in the shower. The traditional doctor gave me some plants to treat that."

Second story

"With one of my pregnancies, I went to see the doctor. I was talking about my diet habit, and I told him about a purge that I did in the second month of the pregnancy… He almost kicked me out of the room! He scolded me severely and told me that that was irresponsible, that it could damage the development of the child, and asked what my intention was, and if I wanted an abortion. He then made me sign a consent form so I would assume all the responsibility of everything. I was very scared."

Third story

"My child had ear pain once, so I put some drops of *ruda* [medicinal plant] in her ear and it helped. Some days after that, we went to see the doctor for a regular check-in. While doing the physical examination, the doctor noticed that my daughter had a green-coloured ear. He was very angry, he scolded me and called me irresponsible. Since then, I never say anything about traditional medicine. I try to avoid the health system as much as possible."

Cultural safety stories described by the medical students

First story

"Now that we are doing home visits in *Tenjo* [rural municipality] as part of our family medicine rotation, we have noticed that people usually have orchards at home. When we visit them, patients offer *agüitas* [plant infusions], for example *agüita de poleo* [medicinal plant] and whatnot… And when that happens, I am reminded of what I have learned [cultural safety training], and I receive those *agüitas* with affection, and it is a way to bond with people, we ask them about that [traditional medicine]. One time, a patient even gave me some plants to bring to my home."

Second story

"I am doing my home visits rotation as an intern, and I went to a traditional medicine user household. I was talking about the plants, and a woman told me that *ruda* [medicinal plant] is not only medicinal, it is a plant that also protects you. She told me that I have to take five sprouts of *ruda* and keep them with me, like in my wallet. Later on, the woman picked up five sprouts, packed them, and gave them to me. I think that it [cultural safety] makes them more receptive, they say things such as 'I hope you come back soon to my house', I guess that it would make them more adherent to the treatment… like it would improve the doctor-patient relationship."

Third story

"It is clear that I won't give prescriptions of traditional medicine to patients, because I don't know how to do that. But there are small things that we can do, for example, I remember what traditional medicine users say about common cold care. I think it is five days. At the hospital, I could provide advice like 'keep your child warmly clothed, cover their nose and mouth and don't expose them to the cold.' A baby with bronchiolitis is a good example, I can advise the mom, if she is going to transport the baby, 'please cover them up, keep them warmly clothed.' Very basic things."