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Cultural competence in a primary healthcare center in Santiago de Chile: a mixed methods design

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Background: *The immigrant population in Chile is growing significantly, challenging the health care system's capacity to provide sensitive and effective care.* ***Aim:*** *To assess the cultural competence of Chilean primary health workers.* ***Material and Methods:*** *This mixed-methods study used a quantitative scale and semi-structured interviews to examine the cultural competence of a Chilean primary health care team in their care for the international migrant population. The study pointed to specific variables that were associated with increased cultural competence, including age, intercultural life experiences, and having received relevant training.* ***Results:*** *The two approaches produced largely convergent results. The dimensions of cultural competence with the highest scores on the quantitative scale were also the theoretical dimensions with the greatest discursive density in the qualitative analysis.* ***Conclusions:*** *The analysis provides a starting point for policies aimed at the development of cultural competence in the national scenario, suggesting a general direction to foster transcultural competence in health, such as formal training and the promotion of informal spaces of sensibilization.*

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Key words: *Cultural Competency; Human Migration; Primary Health Care.*

Competencia cultural en un centro de atención primaria en Santiago de Chile: un diseño de métodos mixtos

Antecedentes: *La población migrante en Chile ha crecido significativamente, desafiando la capacidad del sistema de salud de proporcionar atenciones sensibles y eficaces.* ***Objetivo:*** *Examinar la competencia cultural de un equipo de atención primaria de salud.* ***Material y Métodos:*** *Este estudio de métodos mixtos utilizó una escala cuantitativa y entrevistas semiestructuradas, para examinar la competencia cultural de un equipo de atención primaria de salud en su atención a la población migrante internacional. Se evaluaron variables específicas que se asociaron con una mayor competencia cultural, entre ellas la edad, las experiencias vividas de interculturalidad y el haber recibido capacitación.* ***Resultados:*** *Los dos enfoques produjeron resultados ampliamente convergentes. Las dimensiones de la competencia cultural con las puntuaciones más altas en la escala cuantitativa, fueron también las dimensiones teóricas con mayor densidad discursiva en el análisis cualitativo, lo que ayuda a dilucidar la evolución de este fenómeno en Chile.* ***Conclusiones:*** *El análisis proporciona*

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un punto de partida para las políticas dirigidas al desarrollo de la competencia cultural en el escenario nacional, sugiriendo una dirección general para fomentar la competencia transcultural en salud, como la capacitación formal y la promoción de espacios informales de sensibilización.

Palabras clave: *Atención Primaria de Salud; Competencia Cultural; Migración Humana.*

Chile has become a major destination for migrant populations in South America over the past decade[1]. It has been estimated that currently there are 1,462,103 international migrants living in Chile[2], representing 7.7% of the population.

There has been some progress towards bridging the health care gaps between Chilean-born and immigrant residents.

Despite regulatory advances, however, repeated episodes of discrimination and racism experienced by the migrant population in their contact with health services and their workers have been documented[3–6].

On an international level, cultural competence in health (CCH) has emerged as an approach to providing high-quality services to culturally-diverse populations[7] and closing health care gaps[8]. In Chile, the International Migrant Health Policy includes the directive that health facilities should foster CCH among their workers[4]. This study was designed to examine the CCH of workers at a primary healthcare center in Santiago de Chile. We consider it relevant as a starting point to reflect on how to continue to address its promotion. The facility is located in one of the ten communes with the greatest concentrations of immigrants in the country[9].

Materials and Methods

This study applied a concurrent mixed-methods design. The quantitative analysis applied the only instrument developed and validated in Chile to estimate CCH, the Cultural Competence Measurement Scale for Health Care Workers (EMCC-14)[10]. This tool evaluates the dimensions Sensitivity, Knowledge, and Skills for intercultural clinical encounters. These dimensions are identified as prerequisites for achieving CCH[11,12].

This approach included the universe of workers at the health care center. Workers were invited to participate in a self-administered version of the EMCC-14. Total scores range from 0 to 100 and can be used to compare a study sample with the reference population in which the tool was validated, where the mean score was 74.6. Additionally, a questionnaire was included to gather sociocultural, demographic, education, and work-related information, as these factors have been associated with variations in CCH scores from various instruments[13].

A bivariate analysis was performed on the EMCC-14 scores and other questionnaire variables, using Mann-Whitney U or Kruskal-Wallis tests as appropriate, with Stata 12 software.

The qualitative analysis was performed using an empirical phenomenological and reflexive approach, with flexible theoretical sampling to include all profiles of health care workers comprised in the quantitative sample, taking into account gender, age and the diversity of roles in the health care team. A total of 8 semi-structured interviews were conducted to explore the quantitative dimensions addressed in the EMCC-14, through the perceptions and discourses of health workers regarding their experiences with intercultural clinical encounters, knowledge of other cultures (Knowledge), explicit bias (Sensitivity), and strategies for addressing cultural issues (Skills) (Box 1).

A coding system was created based on thematic analysis[14] using the theoretical model that guided the development of the quantitative instrument. The interview transcripts were coded and the data was organized according to the informant's profile. At least two co-investigators coded each interview. Thematic analysis by profile was carried out using the qualitative data analysis software Atlas.ti 8. A side-by-side comparison for merged data was performed to identify areas of convergence between the two data collection approaches[15]. The results were used to develop a summary table for the dimensions explored.

The procedures complied with ethical standards in accordance with the Declaration of

Helsinki. This study was approved by the Human Research Ethics Comitee of the Faculty of Medicine from the University of Chile in 2019, and the fieldwork was conducted at the end of that year.

Results

Quantitative Analysis

The sample universe included 147 workers, 17 of whom were excluded for not meeting entry criteria. Other than those excluded, none of the candidates refused to participate. The final sample for the quantitative study was 130 workers; the sample characteristics are shown in Table 1. This workforce was highly feminized (femininity index = 348.3) and consisted largely of young adults. The health care team included a multidisciplinary staff consistent with the typical professional profile of contemporary Chilean primary care centers[16]. These roles were grouped into four main types of self-reported function (Appendix). From the total sample, only 21 workers (16.2%) had received any training on intercultural or immigrant-related issues. The most commonly-reported intercultural life experiences were interactions with immigrants at work (98.5%) or in one's personal life (84.6%). A smaller, but important portion of the sample (27.7%) reported having lived outside their country of origin.

Table 2 shows the scores for the three theoretical dimensions of CCH. Workers showed relatively high scores for Knowledge, intermediate scores for Skills, and the lowest scores for Sensitivity, which are consistent with the reference population for the instrument.

The median total score for CCH was 73 points (IQR 64–84) on a scale of 0–100. Male and female staff had similar scores.

There were significant differences by age group ($p = 0.028$). The 20–29-year-old group had the highest scores [median 78 (IQR 68–86)], followed by the 30-39-year-old [median 77 (IQR 71–86)], both of which were higher than the median of the whole sample.

As expected based on the results for the individual dimensions, total CCH scores were higher ($p < 0.001$) for the group who had received training [median 83 (IQR 75–96)].

Qualitative Analysis

The sample for the qualitative cultural competency analysis consisted of 1 male and 7 female workers and represented all the worker´s profiles at the facility (Box 2).

While Cultural Sensitivity did not surface often in the workers' discourses, there was a certain degree of consensus when the issue arose. The workers described that the immigration phenomenon had become visible in recent years: "I think that we're still lagging in that area, because we still aren't that cosmopolitan here […]. We have

Box 1. CCH dimensions and interview topics

Dimension	Definitions	Interview topic
Sensitivity	"It corresponds to the understanding of one's own cultural influences that affect our beliefs, values and attitudes. It relates to awareness of our cultural heritage, experiences, emotional reactions to other cultural groups, prejudices and stereotypes. As well as respect and appreciation of cultural diversity"	Presence of explicit bias
Knowledge	"It relates to understanding the views of culturally different individuals and groups. It includes being aware of our social impact, communication style, knowledge of groups we are in contact with, socio-political influences, immigration, discriminatory practices in the groups with whom we are in contact, socio-political influences, immigration, discriminatory practices in the community, effects of institutional barriers, among others"	Knowledge about the other
Skills	"They are understood as the use of culturally appropriate intervention and communication skills. They relate to ways of adapting interventions to the different recipients and cultural contexts from which they come, practicing different verbal and nonverbal communication styles, adopting ways to decrease prejudice and discrimination in practices, familiarizing oneself with relevant research on racial or ethnic groups, and other associated research"	Approach strategies in intercultural encounters

[a] Own translation of the definitions available in Escala de medición Competencia Cultural (EMCC-14): Manual de Aplicación.

Table 1. Sample characteristics: sex, age, occupational variables, and intercultural experiences

Variable	Category	Study sample (n = 130)	
		n	%
Sex	Female	101	77.7
	Male	29	22.3
Age (years)	Median (IQR)[a]	37.5 (29–52)	
Years working at health center	Median (IQR)	5.6 (2.5–13)	
Occupation	Administrative	18	13.9
	Auxiliary services	9	6.9
	Health care team	96	73.9
	Managers	7	5.3
Training[b]	Yes	21	16.2
	No	109	83.9
Lived experiencies of interculturality			
Lived in a different city[c]	Yes	62	47.7
	No	68	52.3
Lived in a different country[c]	Yes	36	27.7
	No	94	72.3
Neighborhood[d]	Yes	85	65.4
	No	45	34.6
Personal life[d]	Yes	110	84.6
	No	20	15.4
Work[d]	Yes	128	98.5
	No	2	1.5

[a]Median (interquartile range) [b]Received some type of intercultural training focused on indigenous and/or migrant populations [c]Currently or previously lived in a city or country other than place of birth [d]Interacted or had a relationship with migrant individuals in the given scenario.

started to see these populations over the past ten or fifteen years" (E07).

Interviewees described as well as a gap between "older" and "younger" generations. The workers indicated that younger generations show greater facility in recognizing and appreciating diversity.

On the other hand, some workers reported a sense that immigrants actually had an advantage in terms of access to care as compared to some sectors of the Chilean-born population. The interviewees attributed this phenomenon to a growing awareness of rights among the immigrant population, which they perceived as somewhat inappropriate. However, the workers recognized that the international migrant population provokes distinct responses, discourses, and emotions, with negative reactions associated with poverty and stereotypes and stigmas regarding certain nationalities.

"I think that many, many people don't treat them the same as Chilean patients, for example, okay? Or not just like Chileans, you know? I mean, sometimes they are foreigners as well. I remember a case on the service, there was a Hindu or Arabic guy, I don't remember. He was really cute, very attractive. He was also an immigrant, he maybe didn't have papers either, but I think it's more of a cultural issue […] of different perceptions, I don't know, like, about poverty, or what's ugly or nice, I don't know" (E01).

The anecdotes reported indicate that cultural sensitivity is a process that takes place on a behavioral and emotional level, not just a cognitive level. The process requires openness to learning and the ability to examine one's own beliefs when they are conflict with those of a patient from

Table 2. Sensitivity, knowledge, skills, and cultural competence scores by sex, age, and work-related variables

Variable	Category	Study sample (n=130)				
		Sensitivity (0–100)[a]	Knowledge (0–100)[a]	Skills (0–100)[a]	Competence (0–100)[a]	p-value[b]
Total		Median (IQR)	Median (IQR)	Median (IQR)	Median (IQR)	
		63 (44–81)	88 (75–100)	75 (67–88)	73 (64 – 84)	
Sex	Female	56 (44–75)	88 (75–100)	75 (71–88)	73 (66–84)	0.858
	Male	69 (56–88)	88 (69–94)	75 (63–83)	77 (64–82)	
Age (years)	20-29 (n = 34)	72 (56–88)	88 (75-100)	75 (71–83)	78 (68–86)	
	30-39 (n = 35)	63 (50–81)	94 (75-100)	79 (71–88)	77 (71–86)	
	40-59 (n = 39)	56 (44–69)	81 (63-94)	75 (63–88)	70 (57–82)	0.028
	≥60 (n = 22)	59.5 (44 -81)	88 (75-94)	75 (67–92)	72 (63–80)	
Years working at health center	≤2.5 (n = 33)	75 (56–94)	88 (81–100)	79 (75–88)	79 (70–86)	
	2.6-5.5 (n = 32)	63 (44–88)	88 (75–100)	77 (67–83)	72 (66–85)	
	5.6-13 (n = 36)	50 (44–69)	78 (69–97)	75 (65–90)	71 (62–81)	0.059
	>13 (n = 29)	63 (44–75)	88 (75–94)	75 (63–83)	71 (63–82)	
Occupation	Administrative	50 (31- 69)	69 (50–75)	75 (63–83)	65 (46–71)	
	Auxiliary services	44 (38–56)	81 (75–88)	63 (54–92)	66 (61–70)	0.001
	Health care team	63 (50–81)	88 (75–100)	79 (69 -85.5)	75 (68–84)	
	Managers	88 (81–100)	100 (100–100)	75 (75- 100)	84 (86–96)	
Training	Yes	81 (50–94)	94 (88–100)	83 (75–96)	83 (75–96)	0.001
	No	56 (44–75)	81 (75–94)	81 (75–94)	75 (67–83)	
Lived experiences of interculturality						

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Continuation Table 2

Lived in a different city	Yes	63 (50–88)	88 (75–100)	75 (67–88)	73 (66–84)	0.520
	No	63 (44–75)	81 (75–94)	75 (71–85.5)	73 (64–82)	
Lived in a different country	Yes	66 (50–88)	88 (75–97)	75 (67–83)	73 (69–83)	0.510
	No	63 (44–75)	84.5 (75–100)	75 (67–88)	73 (64–84)	
Neighborhood	Yes	63 (44 - 75)	88 (75–100)	79 (71–88)	73 (66–86)	0.471
	No	63 (50–88)	88 (75–94)	75 (63–79)	73 (63–82)	
Personal life	Yes	66 (50–81)	88 (75–100)	75 (71–88)	73 (68–86)	0.009
	No	53 (44–63)	81 (69–94)	69 (58–79)	66 (61–74)	
Work	Yes	63 (50–81)	88 (75–100)	75 (67–88)	73 (65–84)	0.039
	No	31.5 (25–38)	43.5 (6–81)	69 (63–75)	51 (41–61)	

[a]Score: minimum–maximum [b]Mann-Whitney U test for dichotomous variables; Kruskal-Wallis test for polychotomous scores.

another culture.

"Sometimes you wish a female patient would take care of herself (birth control), and you know that she wants to take care of herself too [...] but it can be hard to convince her, for example, or to understand her reluctance. You don't understand, but, you respect her; you know what I mean? […] I can understand, I can imagine what it's like, how I would feel if someone were trying to meddle in my decisions. But, when it's all said and done, yeah, I do try to convince her, you know?" (E01).

Finally, many workers noted that prolonged contact with diverse populations cultivates respect and appreciation for international migrants and their origin cultures.

In terms of Cultural Knowledge, the workers have a sense that the immigrant population is growing. The workers also noted a marked difference between groups of immigrants from Peru, whom they perceive as well-integrated into the community, and groups of immigrants from Haiti, who are seen as separate: "I know that there are a lot of Peruvians, but they don't stand out so much. The ones that stand out are the Haitians, because of the language […] Again, they aren't the majority, but they do stand out a lot" (E02).

In general, the specific cultural knowledge demonstrated by the workers is limited. The examples reported often refer to aspects of Haitian culture, perhaps because this population is the most notably "other" culture seen regularly at the facility.

The interviewees agreed that there are no systemic barriers to access for immigrants because of administrative resolutions that guarantee care.

On the other hand, barriers to equal quality in care persist, reflected as tension during intercultural encounters.

"So, I feel like the barriers to access have been resolved. Now I would like to provide better care, you now? I mean, they get care, they have access and all that, but I think that many, many people don't treat them the same as they treat Chileans, for example" (E01).

In terms of Cultural Skills the workers have developed different strategies to address prejudices, including active prevention. Interviewees reported that they try to identify and intervene in prejudiced behavior, for instance, by consistently challenging insensitive comments from colleagues during informal conversations.

Box 2. Profiles of workers included in qualitative study sample

Sex (M/F)	Age	Occupation	Role	Years working at health center	Intercultural training	Lived experiences of interculturality				
						Lived in a different city	Lived in a different country	Neighborhood	Personal life	Work
F	29	Midwife	Manager	6	x			x	x	x
F	55	Nurse	Manager	15		x			x	x
F	30	Facilitator	Health care team	1.3	x	x	x	x	x	x
F	27	Midwife	Health care team	3		x	x	x	x	x
F	50	Administrative	Administrative	23					x	x
F	44	Administrative	Administrative	5				x	x	x
F	53	Nurse Technician	Health care team	20		x		x	x	x
M	60	Mailroom/ Guard[a]	Administrative	6		x		x	x	x

[a]This worker performed two different roles; he self-reported his work function as "administrative;" however, he was included in the qualitative sample to represent the auxiliary services function.

The workers also reported using reactive or passive strategies, based on the sense that the training and guidelines provided by the health authority were sufficient to mitigate existing barriers. These approaches were complemented by instances of a collective nature, which arise from certain socialization milestones that occur both in the health center and in the neighborhoods where the workers live.

There was low discursive density surrounding the pursuit of new CCH skills. However, interviewees held positive opinions regarding the formal trainings often provided by the health services. These sessions can serve as a gateway to further learning:"I go to the meetings for the Women's Health service… One day there was a Haitian woman there who did the training, all about Haitian culture, and I learned a lot and started to study more" (E01).

Having lived or traveled in a diverse context is an immersive experience that seems to promote a greater facility for intercultural care: "I lived briefly in Peru […] so with Peruvian patients, it's much easier for me to talk to them or compare things with what they do in their culture" (E04).

The desire to learn more about the Creole language was another topic that surfaced frequently.

Finally, the workers emphasized the crucial role of the linguistic facilitator in helping the team to provide adequate care and communicate effectively. This service improves quality of care for patients who do not speak Spanish, as well as improving work conditions for the health center team.

Discussion

A synthesis of the quantitative and qualitative results points to Cultural Knowledge as the dimension with both the greatest discursive density and the highest performance scores. On the other hand, Cultural Sensitivity had the least discursive density and lowest performance scores. These findings are consistent with the validation study of the quantitative instrument[10].

This finding tentatively demonstrates that recognizing one's own biases (Sensitivity) may be challenging compared to a high perception of having Knowledge to address the diversity of the

Box 3. Mixed-analysis matrix

Dimension/ method	National context	Quantitative	Qualitative	Mixed-methods comparison
Context/ Background	International immigration has increased. Immigrants now represent 7.7% of the population, the largest share in the history of Chile	16% of this commune's population are international migrants; 4.1% of the patients registered to this health care center, are immigrants	Perception that the proportion of patients with immigrant status is increasing; perception that the country is progressively becoming less insular	Convergent relationship: Perception of emerging situation in the health center is consistent with the changing national demographics, although the % of patients with immigrant status at this health center is lower than the % in the commune and country
	Despite regulatory advances to guarantee health care for the immigrant population, accessibility issues persist		Perception that there are few barriers to access, but that patients with immigrant status are treated differently than Chilean-born patients	Convergent relationship: Progress status of accessibility of the health system is corroborated
Sensitivity		Dimension with the lowest score for total sample [median 63 (IQR 44-81)] Sensitivity and overall CCH scores significantly lower in older age groups (p=0.028)	Low discursive density Apparent generation gap, where younger workers reported greater facility in recognizing and valuing diversity	Convergent relationship: Scores and discourses suggest that this dimension requires the most improvement, with the best performance among the younger workers Qualitative dimension allows for characterization of the quantitative score
Knowledge		Dimension with the highest score for total sample [median 88 (IQR 75–100)] People who have lived interculturality experiences (living in a different city or country, personal or work relationships with immigrants) have higher scores than their peers for 4 of 5 variables in this dimension, and total CCH scores are significantly higher for those with personal (p=0.009) or work relationships (p=0.039) with immigrant	Highest discursive density Perception that traveling or living in a diverse context facilitates provision of intercultural care and increases understanding of the relevant details of the situation	*Convergent relationship*: Most highly-developed dimension Personal experiences of interculturality seem to affect this dimension in a particularly significant way

Continuation Box 3

Dimension/ method	National context	Quantitative	Qualitative	Mixed-methods comparison
Skills		Persons who received intercultural training have higher scores than their peers for this dimension [median 83 (IQR 75–96); median 81 (IQR 75–94)], although the effect of training is more pronounced in other dimensions Total CCH scores also significantly higher for those who received relevant training [median 83 (IQR 75–96); median 75 (IQR 67–83); p<0.001]	Positive perception of formal training, although preference is for learning in the interactional health care context	*Partially-convergent relationship:* Formal training is associated with higher CCH scores, although the effect of training has the least impact on the "Skills" dimension Qualitatively, this dimension is particularly associated with the development of skills in habitual intercultural practice.

patient population in charge, although the latter is highly unlikely due to the versatility of demographic diversification as noted previously[17]. This issue should be examined critically. It is possible that aspiring to possess categorical knowledge may lead to crystallization of stereotypes regarding immigrant populations and other diverse groups. For example, the esteem regarding Venezuelan immigrants to Chile are framed by perceptions of their contributions to the country based on education level. Adhering to such perceptual patterns may preclude recognition on how classist and racialized preferences evident in Chilean society shape these ideas[18] and affect health delivery[8]. This pattern affects racialized immigrant populations, as has seen historically with native populations in Chile, and normalizes expressions of racism and discrimination.

The mixed-methods analysis produced many convergent results between the quantitative and qualitative data, as portrayed in Box 3. The two approaches reflected a coherent discourse where the topics overlapped. Furthermore, the qualitative results allowed for a more in-depth and contextualized interpretation of the quantitative scores.

Our findings regarding the age of the workers suggest that the younger generations have benefitted from growing up in a more diverse country. Their day-to-day involvement in intercultural situations makes it easier for them to develop cultural competence. This element is associated with lived experiences of interculturality.It should also be noted that a cohort of health care workers has migrated into Chile from other countries in recent years. These workers tend to be employed predominantly in the primary care setting[19]. This situation, therefore, contributes to the diversification of health care teams and engenders intercultural dynamics within the health care culture.

On the other hand, the study results underscore the importance of formal training, noting that in this sample the presence of intercultural training was associated with increased cultural competence, tendency seen in other studies[11]. More research into the characteristics of such training is needed, although based on the findings of this study and others, we can suggest that the basis of this training lies in the development of sensitivity to diverse groups[20]. This point is especially significant in the current climate, as CCH is one of the components of the new International

Migrant Health Policy in Chile, where curricular incursions into the subject are still anecdotal, and lack a body of research to support their adaptation to the Latin American context.

Finally, it is apparent that the regulatory progress in terms of access to health care for immigrants is modulated by the actions and quality of treatment given by health workers, who can affect concrete access to the healthcare system.

The examination of cultural competency conducted in this study, provides a starting point for policies aimed at the development of CCH in the national scenario, suggesting a general direction to foster transcultural competence in health, such as formal training and the promotion of informal spaces of sensibilization.

Limitations

The main limitation of this study is the possibility of a social-desirability bias. We attempted to minimize it, by providing anonymity and allowing for self-administration of the questionnaire.

It should also be noted that some strata in the sample were unbalanced. This study included health professionals, health technicians and administrative personnel of the CESFAM, considering that their functions all together are key aspects of the intercultural health encounter. Technicians and administrative staff were not originally included in the design and validation of the EMCC-14, so we cannot estimate the bias that this theoretical decision may have meant. We consider this as a challenge for developers of standardized instruments aimed at health care teams to include in their design and validation all health care worker profiles, and not exclusively professionals. These limitations were mitigated using a mixed-methods design.

Finally, it can be difficult to interpret the results for the specific dimensions of the EMCC-14. These issues may be due to limited previous applications of this scale and lack of comprehensive recommendations from it's authors.

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