

Healthcare inequalities and interculturality in Northern Argentina: A mixed-methods analysis

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Abstract

Introduction: Health indicators among Latin America's Indigenous peoples remain lower than national averages, making them one of the most disadvantaged socioeconomic groups. This study characterizes the functioning of the health system in the province of Salta (Argentina) and analyzes the priorities and potential spaces for consensus among key actors regarding perinatal health.

Methods: A multiple-choice questionnaire was administered to 609 pregnant women attending primary healthcare centers and hospitals in the province of Salta. Descriptive statistics from its analysis were complemented by twenty in-depth interviews with provincial government officials and Indigenous territorial authorities.

Results: Significant disparities were found in travel time to health services between Indigenous and non-Indigenous women. Among Indigenous women, only 20% reported having given birth in a delivery room during their most recent pregnancy. Differences were also observed among Indigenous groups regarding the health services provided, including support during childbirth; choice of birthing position; and the possibility of incorporating traditional practices. Furthermore, Indigenous communities understood health as closely linked to access to land, housing, recognition of rights, and mutual respect, whereas government officials tended to frame health strategies primarily around the development of integrated health service networks.

Conclusion: Beyond formal declarations, the intercultural health approach has not been effectively implemented in the Salta health system. However, areas of convergence exist between institutional actors and Indigenous communities, particularly regarding the strengthening of primary healthcare strategies and the promotion of coordination mechanisms between formal health regulations and Indigenous cultural knowledge.

Keywords: Indigenous, pregnancy, perinatal, intercultural, discrimination, Salta, Argentina.

Abstract in Español at the end of the article

INTRODUCTION

The Region of the Americas is characterized by extensive cultural diversity, with an estimated 45 million people belonging to Indigenous populations across 24 countries and more than 600 distinct groups. Despite this diversity, Indigenous populations across the region

share a common pattern of structural disadvantage, reflected in lower levels of income, education, and access to basic services such as water, sanitation, and housing, compared to non-Indigenous populations [1,2].

These structural inequalities have direct consequences for health outcomes. Indigenous populations

experience higher levels of morbidity and mortality, with Indigenous women facing compounded vulnerabilities associated with gender, ethnicity, and socioeconomic status [3,4]. Maternal and child health indicators, in particular, remain significantly worse in Indigenous communities, where barriers to access, discrimination, and cultural mismatches between health services and community practices persist [5,6].

In response, health systems in low- and middle-income countries have expanded service coverage and infrastructure. However, growing evidence suggests that improving access alone is insufficient to reduce health inequalities. The quality of care, understood as timely, effective, and culturally appropriate services, plays a critical role in shaping health outcomes [7,8]. Inequalities in quality of care may arise from geographic barriers, differences in service availability, or unequal treatment of patients based on socioeconomic or ethnic characteristics [9]. In this context, accessibility must be understood as a multidimensional concept, encompassing not only physical proximity but also economic, administrative, and cultural factors.

Within this framework, intercultural health approaches have emerged as a strategy to improve the responsiveness of health systems to Indigenous populations. These approaches seek to integrate biomedical services with Indigenous knowledge systems, promote culturally appropriate care, and strengthen community participation in health decision-making [10-13]. However, evidence from Latin America suggests that the implementation of intercultural health policies often remains partial, with persistent gaps between formal policy frameworks and actual practice [14,15].

Experiences from different countries illustrate both the potential and the challenges of these approaches. For example, Ecuador's "Mother- and Child-Friendly Health Facilities" (ESAMyN), Brazil's Indigenous Health Care Subsystem (Subsistema de Atenção à Saúde Indígena) and Mexico's intercultural maternal health model (Modelo de Atención Intercultural en Salud Materna) are among several initiatives that have sought to improve maternal and neonatal care by incorporating culturally appropriate practices and strengthening community engagement. Similarly, international experiences in countries such as Australia, Canada, and New Zealand highlight the importance of community participation and self-management in achieving improvements in Indigenous health outcomes. Together, these experiences suggest that effective interventions require not only service adaptation but also the active involvement of Indigenous communities in the design and governance of health systems [16-25].

In Argentina, health services are organized under a decentralized system in which provinces are responsible for the provision and management of care [26]. The province of Salta, located in the northwest of the country, has one of the highest proportions of Indigenous population and is characterized by diverse geographic regions

where Indigenous and non-Indigenous populations co-exist. These conditions pose significant challenges for the delivery of equitable health services, particularly in maternal and perinatal care. Previous studies have identified limitations in the functioning of health service networks in Argentina, including weak coordination between levels of care and insufficient referral mechanisms, which disproportionately affect Indigenous populations facing additional geographic and cultural barriers [27].

Despite growing attention to intercultural health, there is still limited empirical evidence on how these policies are experienced by users and key stakeholders at the local level. In particular, there is a need to better understand how Indigenous women perceive access to and quality of care, and how these perceptions relate to the perspectives of policymakers and health system actors.

This article contributes to addressing this gap by analyzing the quality of healthcare as perceived by Indigenous and non-Indigenous women, as well as by Indigenous leaders and key public sector actors, in the province of Salta, Argentina. Specifically, the study addresses the following research questions: (i) What are the perceptions of Indigenous communities and their leaders regarding the functioning and quality of health services? (ii) How do public officials perceive maternal and perinatal healthcare for Indigenous women? and (iii) To what extent has an intercultural health model been implemented, and what barriers persist in achieving effective access to care?

Finally, this article is part of a broader research agenda focused on Indigenous health in the Americas and Argentina, including previous work that reviews health interventions aimed at reducing inequalities and improving the well-being of Indigenous populations in the region.

METHODS

We conducted a mixed-methods study combining survey data from women users of public health services with semi-structured interviews with key stakeholders. This design allowed us to analyze perceived access, coverage, and quality of care, while also incorporating the perspectives of decision-makers and Indigenous authorities.

The quantitative component was based on designing and administering a structured questionnaire to assess perceptions of access, coverage, and quality of care among users of the public health system of Salta Province. The target population included pregnant women and women of childbearing age attending public healthcare facilities.

We selected health facilities in three departments of the province of Salta (Tartagal, Orán, and Iruya) based on their high proportion of Indigenous population, their epidemiological relevance in maternal and perinatal health, and their representation of diverse territorial contexts (urban, peri-urban, and rural). In addition, we

included the most important high-complexity referral hospital in the city of Salta, as this facility receives the majority of complex cases referred from the three selected departments, and allows for capturing the continuum of care across levels of the health system. The sample included 34 Primary Health Care Centers (CAPS) and 4 referral hospitals across the selected departments and the provincial capital. Within each facility, we implemented a systematic random approach to participant selection in waiting rooms. Field researchers approached eligible women at different times of the day and week to reduce selection biases and invited them to participate in the study. We collected a total of 609 valid questionnaires.

We established quotas to ensure the representation of Indigenous and non-Indigenous women, according to their relative presence in each facility. Questionnaires were administered in person by trained interviewers, who read the questions aloud and recorded responses. The survey was conducted primarily in Spanish; when necessary, participants received assistance to ensure comprehension. Each questionnaire took approximately 15–20 minutes to complete and was administered in waiting room settings prior to medical consultation.

We analyzed the data using descriptive statistics and inferential methods. We assessed differences between Indigenous and non-Indigenous women, as well as across different Indigenous peoples, using statistical significance tests at the 1%, 5%, and 10% levels. This approach enabled us to identify disparities in perceived access, coverage, and quality of care beyond those typically associated with socioeconomic or geographic factors.

To assess inequalities in geographic access to health-care services, we constructed an equity index (EI) of access based on survey responses. The index is defined as the ratio of the average travel time reported by Indigenous women to that reported by non-Indigenous women for each type of provider. A value equal to one indicates equality in access, values greater than one reflect relatively worse access for Indigenous populations, and values below one indicates worse access for non-Indigenous populations. This measure follows a ratio-based approach commonly used in the analysis of health inequalities to capture relative disparities between population groups, particularly in relation to geographic accessibility and service utilization [28-30]. In this study, the index provides a simple and context-appropriate metric to summarize differences in access between Indigenous and non-Indigenous populations.

The qualitative component was based on stakeholder mapping conducted to identify key actors involved in the design, implementation, and governance of health policies affecting Indigenous populations. This process included identifying relevant institutional and community-level actors to ensure coverage of all sectors involved in the study topic. Based on this mapping, we selected participants using purposive sampling to capture diverse and relevant perspectives. We contacted participants directly through institutional channels and community networks. The final sample included twenty interviewees.

wees.

Twelve interviews were conducted with current and former public officials responsible for primary health-care policies and programs, including the Sumar Program (formerly Plan Nacer), Essential Public Health Functions (FESP), and Health and Interculturality. Eight interviews were conducted with Indigenous territorial authorities representing the Chorote, Guaraní, Kolla, Iogys, Tastil, Weenhayek, and Wichi peoples.

We conducted all interviews in person using a semi-structured interview guide composed of core questions and follow-up prompts. With prior consent, we audio-recorded all interviews using mobile phone recording applications.

Data analysis

We manually transcribed all interviews and conducted a thematic analysis. We used ATLAS.ti software to support the coding process, enabling the systematic organization of data, identification of emergent themes, and comparison across interviews. This process allowed us to identify key themes, as well as patterns of convergence and divergence across participants.

Direct quotations from interviewees were used to illustrate key themes and provide empirical support for the findings. Quotes were selected based on their relevance and representativeness of recurring patterns identified in the analysis. Minor edits were made when necessary to improve clarity and readability, without altering the original meaning of the statements. All quotations were anonymized to protect participants' identities.

We triangulated quantitative and qualitative findings to strengthen the analysis. The survey provided a systematic characterization of users' experiences, while the interviews offered an in-depth understanding of the priorities, constraints, and perspectives of key stakeholders. This integration enabled us to identify structural barriers to access and assess the extent to which an intercultural health approach has been implemented.

Ethics

This study was approved by the ethics committee of the province of Salta through Resolution 11-16 of the Ministry of Public Health and was endorsed in writing by the territorial authorities of indigenous institutions affiliated with ENOTPO (National Encounter of Territorial Organizations of Indigenous Peoples) and their governing councils. We guaranteed confidentiality and anonymity throughout the research process. Participants were informed of the voluntary nature of their participation and their right to withdraw at any time.

RESULTS

Access, coverage, and quality perceived by users

This section presents the results from the survey administered to women users of public health services. Table 1 summarizes the main characteristics of the study population.

Table 1. Main characteristics of the study population.

Variable	Total sample	Indigenous women	Non-Indigenous women
Sample size (n)	609	64%	36%
Average age (years)	26.3	Similar	Similar
Marital status (% married/union)	59.6%	No significant differences	No significant differences
Pregnant at time of survey (%)	24%	No significant differences	No significant differences
Average number of children	1.32	Slightly higher	Lower
Completed primary education (%)	54.6%	43.5%	74.1%
Geographic distribution (%)			
– Tartagal	35%		
– Salta capital	20%		
– Iruya	20%		
– Orán	18%		
– Other localities	7%		

Source: Own elaboration based on user surveys.

As shown, 64% of respondents identified as Indigenous and 36% as non-Indigenous. The sample was geographically distributed across Tartagal (35%), Salta capital (20%), Iruya (20%), Orán (18%), and other localities (7%). The average age of participants was 26.3 years, with no statistically significant differences between groups. Similarly, marital status, pregnancy status, and the number of children did not differ significantly, although Indigenous women reported a slightly higher average number of children.

The most striking difference between groups relates to educational attainment. While more than half of the total sample completed primary education, this proportion was substantially higher among non-Indigenous women compared to Indigenous women, revealing an important structural inequality.

Physical access to healthcare

Physical access to healthcare showed marked disparities between Indigenous and non-Indigenous women.

Travel time to health facilities was used as a proxy measure for geographic accessibility.

On average, women reported approximately one hour of travel time to reach a hospital. However, Indigenous women experienced significantly longer travel times than non-Indigenous women (72 minutes versus 37 minutes). Access to primary health care centers (CAPS) was comparatively closer, with an average travel time of around 30 minutes, although disparities remained evident (33 minutes for Indigenous women versus 14 minutes for non-Indigenous women).

In contrast, access to community-based health actors showed the opposite pattern. Non-Indigenous women reported longer travel times to reach community health agents, suggesting a greater territorial presence of these actors in Indigenous communities.

Table 2 displays the EI, which summarizes these disparities. The index consistently indicated unequal access, particularly in relation to hospital care.

Table 2. HIV Inequality in geographic access to healthcare services by ethnic group (Equity Index, EI).

Provider	Total (minutes)	Non-Indigenous (minutes)	Indigenous (minutes)	EI
Hospital	59.8	37.4	72.6	1.94***
Primary health care center	26.2	13.6	33.3	2.44***
Health agent's house	78.2	84.9	75.0	0.88**
Community health worker	76.3	90.5	69.8	0.77***

Notes: EI is calculated as the ratio of average travel time for Indigenous women to that of non-Indigenous women. Values greater than 1 indicate worse access for Indigenous populations; values below 1 indicate worse access for non-Indigenous populations. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

These results highlight a structural disadvantage in geographic access to formal healthcare services among Indigenous women.

Healthcare utilization patterns

The results reveal important differences in healthcare-seeking behaviors across Indigenous popula-

tions. Figure 1 shows that, across all Indigenous groups, family and friends constitute the primary source of care, followed by public hospitals, with limited use of primary care centers. However, reliance on family-based care varied significantly between them, reaching its highest levels among Wichí women and lower levels among Guaraní women (70% and 54.3%, respectively), with Kolla women occupying an intermediate position (57.3%).

The use of public hospitals was relatively homogeneous across Indigenous groups, while the use of CAPS was more limited and uneven. In particular, Kolla and Wichí women reported lower utilization of CAPS (15.7% and 5.6%, respectively), whereas Guaraní women showed a more balanced pattern of health care utilization, with hospitals and primary healthcare centers each accounting for approximately 20% of responses.

Consultation with community health referents remained marginal across all groups, as did the use of private providers, although the latter appeared slightly more frequent among populations located closer to urban centers.

Perceived quality of childbirth care

The analysis of childbirth care revealed significant limitations in terms of quality and intercultural adequacy. The study examined key dimensions such as the use of delivery rooms, the possibility of accompaniment during childbirth, the choice of birthing position, and the incorporation of traditional practices.

No significant differences were observed between groups in the use of delivery rooms. However, overall utilization remained low, particularly among Indigenous women, of whom only 20% reported using a delivery room during their last childbirth. Likewise, access to accompaniment during childbirth was limited, with only 27.4% of all women reporting access to this option. Fewer than one-third of women overall had the opportunity for companionship, with even lower levels among Indigenous mothers. Among these groups, Kolla women reported the highest rate of accompaniment (42%), whereas Guaraní and Wichí women showed substantially lower levels (10% and 16%, respectively).

The possibility of choosing birthing position was also limited. Overall, only 12.5% of Indigenous women reported being able to do so during childbirth. Although some variation existed between Indigenous groups, access remained low across all Indigenous populations. Among Kolla women, 30.6% reported being able to choose their birthing position, whereas this proportion decreased to 1.5% among Guaraní women.

Finally, the incorporation of traditional practices and the use of traditional medicine during childbirth were generally limited. Significant differences were observed between Indigenous groups. The proportion of women reporting the use of these practices was highest among Kolla women (16.67%), followed by Guaraní women (8.51%) and Wichí women (1.67%). These differences

were statistically significant across groups.

Perceptions of key actors

This section presents the main findings from the interviews conducted with key stakeholders, organized around areas of alignment and divergence between actors.

Areas of alignment between stakeholders

Despite differences in perspectives, both institutional actors and Indigenous representatives identified several shared priorities regarding the functioning of the health system.

First, there was broad agreement on the central role of primary health care (PHC) as the main strategy for expanding coverage, particularly in geographically dispersed territories. In this context, health agents and community health workers were recognized by both groups as key actors linking Indigenous communities with the formal health system, especially in remote areas.

Second, both groups emphasized the importance of strengthening referral and counter-referral systems within the healthcare network. Government officials described the organization of the system into operational areas that integrate hospitals, health centers, and outreach posts. Indigenous authorities also showed awareness of these structures and stress that they often represent the only available pathway for accessing higher levels of medical care.

Finally, stakeholders agreed on the need to improve infrastructure and service organization to better respond to maternal and perinatal health needs, particularly among Indigenous groups. Institutional actors highlighted ongoing efforts such as the development of regionalized perinatal networks and the adoption of the Family-Centered Safe Motherhood model, which incorporates elements of an intercultural approach and promotes the involvement of families and communities. They also acknowledged the need to re-adapt delivery rooms to better accommodate cultural practices and facilitate family involvement, noting that alternative models allowing family presence during childbirth are currently being evaluated.

Figure 2 presents the main areas of alignment identified in the interviews, organized around two key themes: the PHC strategy and the referral and counter-referral system. For each theme, quotes from government officials are presented on the left and quotes from Indigenous representatives on the right, reflecting the shared recognition of these strategies as central to healthcare delivery in the province.

Areas of divergence between stakeholders

Significant divergences emerged between institutional actors and Indigenous representatives, particularly regarding perceptions of quality of care and the extent to which an intercultural health approach has been effectively implemented.

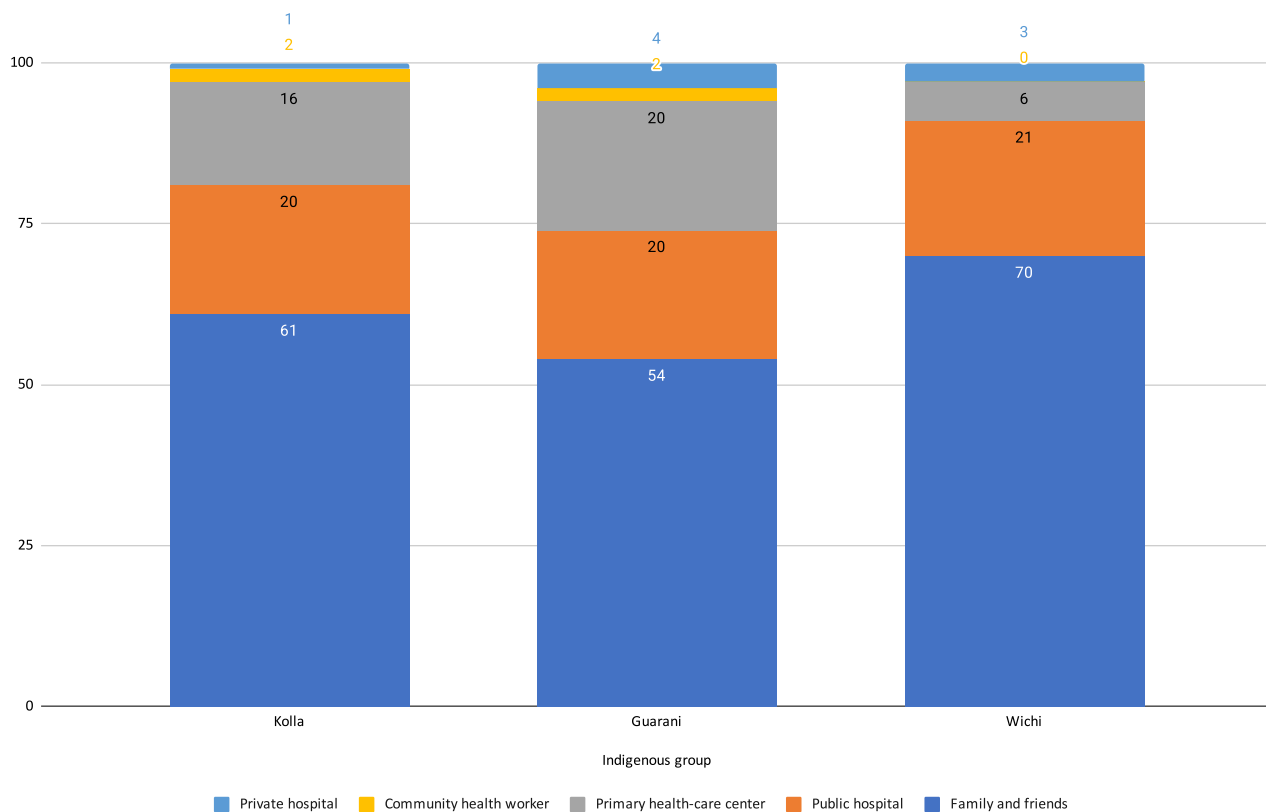


Figure 1. First source of care among Indigenous women, by ethnic group (Source: Own elaboration based on user surveys).

While government officials generally described the quality of healthcare services as satisfactory and improving over time, Indigenous authorities expressed predominantly negative perceptions. They emphasized the persistence of economic, geographic, and cultural barriers that limit effective access to healthcare services. Cultural barriers, in particular, were pointed as a central issue. Indigenous interviewees reported that the lack of an intercultural approach affected communication with health professionals and undermines trust in the system. Experiences of discrimination and mistreatment were frequently mentioned. As one participant explained, “*women who do not speak Spanish are mistreated and treated with contempt*”. In addition, the limited recognition of traditional medicine and ancestral practices was perceived as a form of disrespect toward Indigenous knowledge systems.

Differences were also observed in perceptions of institutional initiatives aimed at promoting intercultural health. While government officials highlighted the role of bilingual facilitators and training programs for healthcare personnel, Indigenous representatives reported that these measures had produced limited impact and that major communication barriers persisted. Notably, most Indigenous interviewees were unaware of the existence of specific institutions or programs intended to address their healthcare needs.

Another area of divergence concerned the organi-

zation of care during pregnancy and childbirth. Institutional actors emphasized the importance of referring high-risk pregnancies to higher-complexity centers, whereas Indigenous authorities expressed a preference for receiving care within their communities, in settings that respected their cultural practices and social support networks.

Figure 3 presents the main areas of divergence identified in the interviews, organized around two themes: the quality of healthcare and the intercultural health model. For each theme, quotes from government officials are presented on the left and quotes from Indigenous representatives on the right, illustrating contrasting experiences and assessments of the current state of healthcare services in Indigenous communities.

Structural barriers to access and continuity of care

The interviews also identified a set of structural barriers that affected access to and continuity of care.

Geographic barriers were consistently highlighted, particularly by Indigenous representatives. Long distances between communities and healthcare facilities, combined with poor road conditions, significantly hinder access, especially in the Andean and Chaco regions. Indigenous representatives highlighted that the populations most affected are those living in the Puna and the Calchaquí Valley, including Kollas, Atacama, Tastil, and Diaguaita, as well Indigenous populations located in the

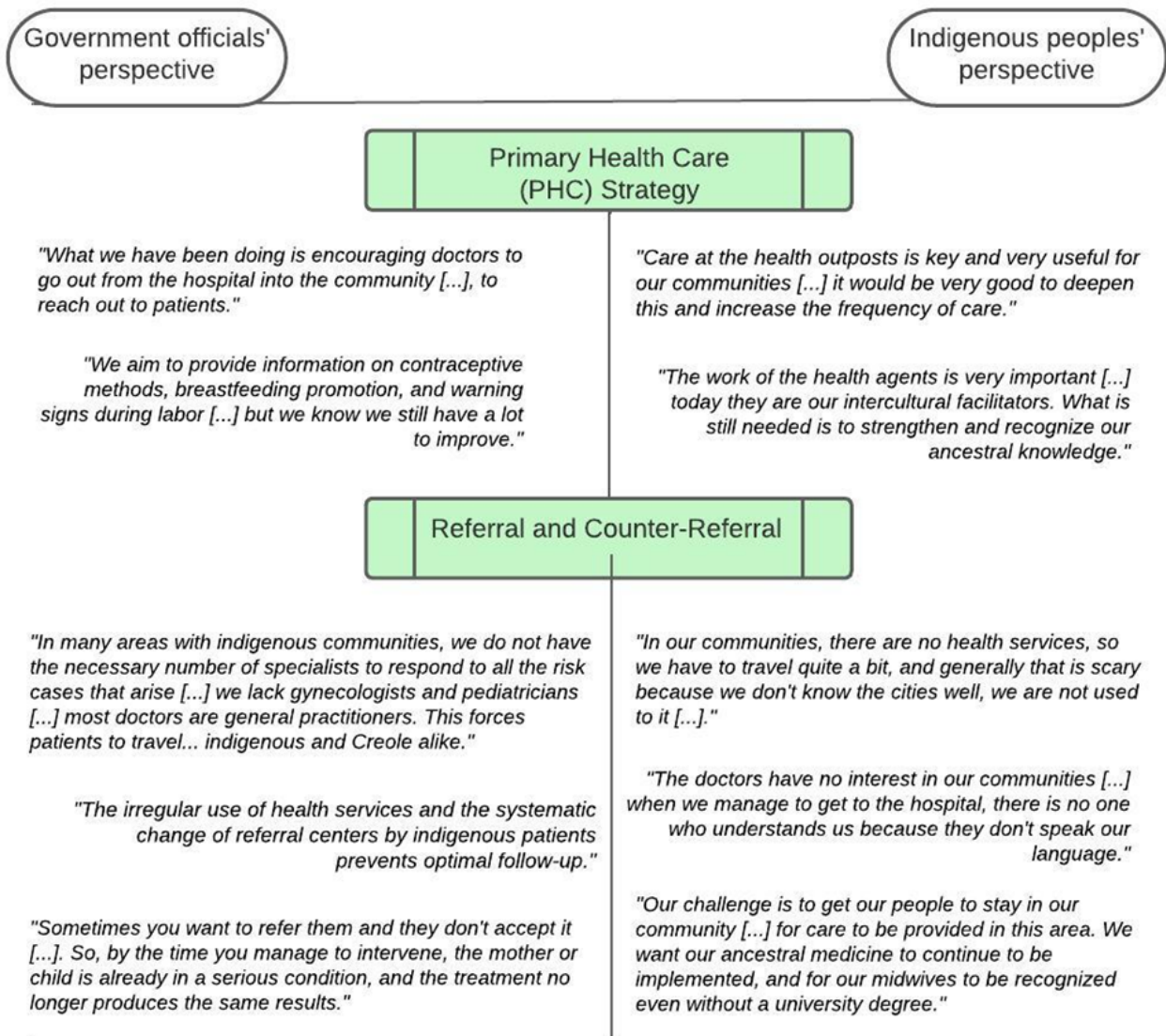


Figure 2. Areas of alignment in the priorities of government officials and Indigenous communities (Source: Own elaboration based on the interviews carried out).

Salta Chaco area.

Institutional barriers were also identified. Government officials acknowledged that the health system faces several challenges, including the lack of standardized protocols, weaknesses in referral and counter-referral processes, and shortages of human resources and equipment, affecting both Indigenous and non-Indigenous populations. Nevertheless, these limitations contribute to fragmented care and difficulties in ensuring continuity of treatment.

From the perspective of Indigenous communities, additional barriers emerge in the interaction with the health system itself. Women often experienced difficulties understanding medical information and navigating institutional procedures, which discourages continued use of healthcare services. In some cases, resistance to

referral for high-risk pregnancies was reported, often associated with previous negative experiences within the healthcare system. When referrals do occur, they frequently involve the displacement of extended family groups, generating tensions with hospital norms and infrastructure limitations.

Finally, challenges related to continuity and follow-up of care were identified. The intermittent use of services and the movement of patients between different facilities lead to discontinuities in care and duplication of clinical practices.

DISCUSSION

This study examined perceived access, coverage, and quality of healthcare among Indigenous and non-Indigenous women in the province of Salta, Argentina,

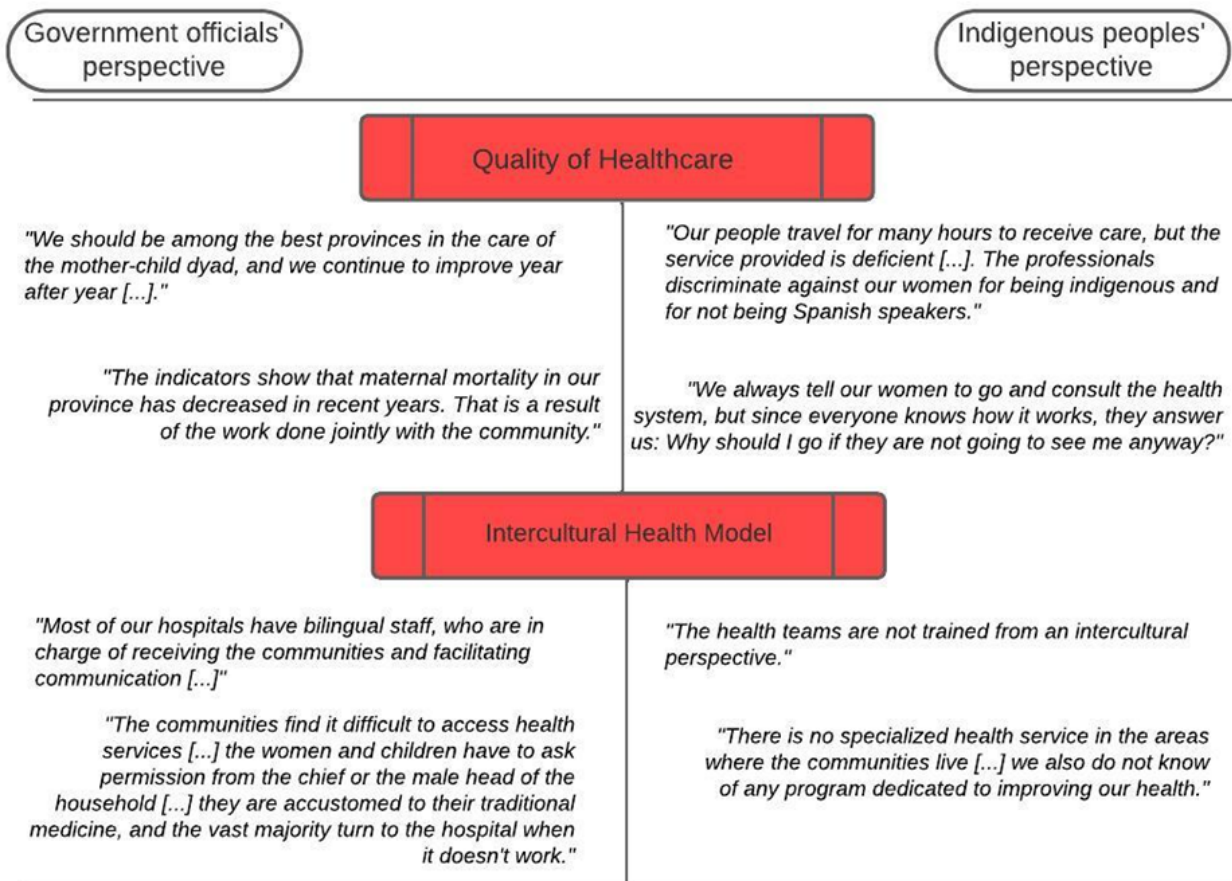


Figure 3. Areas of divergence in the priorities of government officials and Indigenous communities (Source: Own elaboration based on the interviews carried out).

and explored the perspectives of key stakeholders regarding the functioning of the health system. The findings reveal three main results. First, significant disparities persist in geographic access and quality of care, particularly affecting Indigenous women. Second, patterns of healthcare utilization show a tendency to bypass primary care services in favor of hospitals and family-based care. Third, important divergences and some areas of agreement were found between institutional actors and Indigenous communities regarding the implementation of an intercultural health model,

These findings are consistent with broader evidence on Indigenous health inequities in Latin America, where structural disadvantages, including geographic isolation, language barriers, discrimination, and limited culturally appropriate care, continue to shape differential access to health services [31-33]. The disparities documented in this study suggest that, despite normative advances such as Law No. 7,856 and the adoption of the Family-Centered Safe Motherhood model, these structural conditions remain largely unaddressed in the province of Salta.

A notable pattern identified in this study is the ten-

dency of Indigenous women to bypass primary care services and seek care directly at hospitals or through family and community networks. This behavior has been widely documented in contexts where primary care is perceived as low quality, culturally unresponsive, or simply inaccessible [34]. In segmented health systems such as that of Salta province, where public, social security, and private networks coexist with limited coordination, this bypass pattern contributes to the saturation of higher-complexity facilities and breaks the continuity of maternal and perinatal care [35].

The qualitative findings highlight a critical tension between biomedical and intercultural models of care. While government officials described improvements in service organization and maternal health indicators, Indigenous communities consistently reported experiences of discrimination, cultural insensitivity, and the limited recognition of traditional practices. This divergence is consistent with evidence from other Latin American contexts showing that intercultural health policies frequently remain symbolic in their implementation, particularly when Indigenous communities are excluded from their design and governance [15,36].

In particular, the concept of “spaces for consensus on priorities,” illustrated in Figure 4, provides a useful interpretive framework for organizing the findings. As shown in the diagram, both institutional actors and Indigenous representatives converge on the importance of strengthening integrated health service networks and the primary health care strategy. However, they diverge significantly in their understanding of what quality healthcare means, the role of traditional medicine, and the degree of intercultural adaptation required within the system. This distinction between formal alignment and substantive divergence reflects a broader pattern in the literature: intercultural frameworks are frequently adopted at the normative level without corresponding changes in institutional culture, resource allocation, or governance structures [37,38].

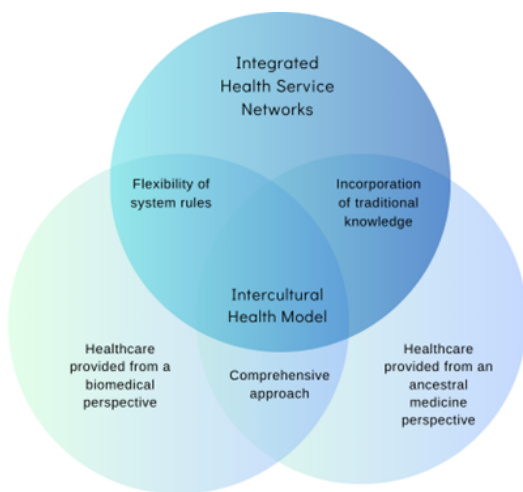


Figure 4. Spaces for consensus on the priorities of government officials and indigenous communities (Source: Own elaboration based on the interviews carried out).

On the question of primary health care, both groups recognized the central role of health agents and community outreach in reaching geographically dispersed populations. However, Indigenous representatives emphasized that these figures are currently fulfilling a translation function rather than acting as genuine cultural mediators with full understanding of communities’ worldviews and needs. The effective functioning of bilingual facilitators thus requires not only linguistic competence but also institutional recognition and an expanded scope of action.

The incorporation of traditional medicine and the flexibilization of biomedical practices remain key areas of tension in this study, as in comparable contexts across the region. Intercultural health initiatives that have shown the greatest success share a common feature: they were built on genuine community self-management and the equal recognition of Indigenous knowledge systems [39]. In the case of Salta, the evidence from user surveys suggests that the coexistence between traditional and biomedical medicine is already occurring—although with limitations— in certain departments, particularly in

Orán, Iruya, and Tartagal. This points to a practical opportunity: these localities could serve as experiences—identifying challenges and improvements—for the development of more structured intercultural care models that formally incorporate ancestral practices and community governance, rather than relying on informal coexistence.

Several policy implications emerge from these findings. First, the role of bilingual facilitators should be expanded and redefined: rather than functioning as translators, they should be trained and institutionally recognized as cultural mediators capable of bridging the gap between biomedical logic and indigenous health conceptions. Second, improving the availability and continuity of care in maternal and perinatal health requires simultaneously addressing supply-side constraints—human resources, infrastructure, referral protocols—and demand-side barriers, including institutional distrust and cultural distance. Lastly, and most critically, achieving meaningful progress in intercultural health requires the active and binding participation of Indigenous communities in the design, implementation, and evaluation of health policies.

Conclusions

This study highlights persistent inequalities in access to and quality of healthcare affecting Indigenous women in the province of Salta. Despite policy advances and the formal adoption of an intercultural health framework, significant geographic, cultural, and institutional barriers continue to limit effective access to care.

The findings reveal three key challenges. First, Indigenous women face longer travel times and structural barriers that hinder timely access to services. Second, patterns of healthcare utilization show a tendency to bypass primary care in favor of hospitals and family-based care, reflecting limitations in the accessibility and perceived quality of primary healthcare services. Third, important divergences persist between institutional actors and Indigenous communities regarding the meaning of quality of care and the implementation of an intercultural health approach.

At the same time, the study identifies areas of potential consensus. Strengthening primary healthcare, improving referral and counter-referral systems, and expanding the role of community-based actors emerge as shared priorities. However, achieving meaningful progress requires moving beyond formal policy frameworks toward their effective implementation.

In particular, advancing an intercultural health model demands the active participation of Indigenous communities in decision-making processes, the recognition of traditional knowledge systems, and the development of culturally appropriate care practices. This includes strengthening training spaces for health personnel, promoting dialogue between biomedical and Indigenous perspectives, and adapting service delivery to local contexts.

Overall, reducing inequalities in access to healthcare in Salta requires addressing both structural constraints and institutional practices, while fostering a more inclusive and culturally responsive health system.

DECLARATIONS

AI utilization

Not applicable. No artificial intelligence tools were used in the research process or in the writing of this manuscript.

Competing interests

The authors report no conflicts of interest.

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Author contributions

The research protocol and instruments were designed by DM. All authors contributed to the implementation and design of the study. Fieldwork was conducted by DP (Indigenous peoples) and PU (institutional health system). The first draft of this article was written by DM and PS,

and all authors commented on subsequent versions. All authors read and approved the final manuscript.

Data availability

The materials and data supporting the findings of this study are available from the corresponding authors upon reasonable request.

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ABSTRACT IN SPANISH

Desigualdades en la atención de salud e interculturalidad en el norte de Argentina: un análisis de métodos mixtos

Introducción: Los indicadores de salud de los pueblos Indígenas de América Latina continúan siendo inferiores a los promedios nacionales, lo que los convierte en uno de los grupos socioeconómicos más desfavorecidos. Este estudio caracteriza el funcionamiento del sistema de salud en la provincia de Salta (Argentina) y analiza las prioridades y los posibles espacios de consenso entre actores clave en torno a la salud perinatal.

Métodos: Se administró un cuestionario de opción múltiple a 609 mujeres embarazadas que asistían a centros de atención primaria y hospitales de la provincia de Salta. Los análisis descriptivos fueron complementados con veinte entrevistas en profundidad realizadas a funcionarios del gobierno provincial y autoridades territoriales indígenas.

Resultados: Se encontraron diferencias significativas en el tiempo de traslado hacia los servicios de salud entre mujeres Indígenas y no Indígenas. Entre las mujeres Indígenas, solo el 20% reportó haber dado a luz en una sala de parto durante su embarazo más reciente. También se observaron diferencias entre los distintos pueblos Indígenas respecto a los servicios de salud ofrecidos, incluyendo el acompañamiento durante el parto, la posibilidad de elegir la posición de parto y la incorporación de prácticas tradicionales. Además, las comunidades Indígenas entendían la salud como estrechamente vinculada al acceso a la tierra, la vivienda, el reconocimiento de derechos y el respeto mutuo, mientras que los funcionarios gubernamentales tendían a enfocar las estrategias de salud principalmente en el desarrollo de redes integradas de servicios de salud.

Conclusión: Más allá de las declaraciones formales, el enfoque de salud intercultural no ha sido implementado de manera efectiva en el sistema de salud de Salta. Sin embargo, existen espacios de convergencia entre los actores institucionales y las comunidades Indígenas, particularmente en relación con el fortalecimiento de la atención primaria de salud y la promoción de mecanismos de coordinación entre las normativas formales del sistema de salud y los conocimientos culturales de los pueblos Indígenas.

Palabras clave: Indígena, embarazo, perinatal, intercultural, discriminación, Salta, Argentina.

REFERENCES

- [1] Organización Panamericana de la Salud. Salud de los Pueblos Indígenas de las Américas: Evaluación de los logros en Salud en el Marco del Decenio de los Pueblos Indígenas del Mundo. Washington DC: Organización Panamericana de la Salud; 2006. <https://www.paho.org/sites/default/files/2023-12/serie-indigenas-55-salud-pueblos-indigenas-americas-2008.pdf>.
- [2] Cevallos R, Amores A. Prestación de Servicios de Salud en zonas con Pueblos Indígenas: Recomendaciones para el Desarrollo de un Sistema de Licenciamiento y Acreditación de Servicios Interculturales de Salud en el marco de la Renovación de la Atención Primaria de la Salud. Washington D.C.: Organización Panamericana de la Salud; 2009. <https://www.paho.org/es/documentos/prestacion-servicios-salud-zonas-con-pueblos-indigenas-0>.
- [3] Rojas R. Programa Salud de los Pueblos Indígenas de las Américas Plan de Acción 2005 – 2007. Washington DC: Organización Panamericana de la Salud; 2004. <https://www3.paho.org/hq/dmdocuments/2009/50-SALUDINDIGENA-PLAN-%202005-2007.pdf>.
- [4] Breilh J. La determinación social de la salud como herramienta de transformación hacia una nueva salud pública (salud colectiva). Rev Fac Nac Salud Pública. 2013;31(Suppl. 1):13-27. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-386X2013000400002.
- [5] Organización Panamericana de la Salud. Una visión de salud intercultural para los pueblos indígenas de las Américas. Washington D.C.: Organización Panamericana de la Salud; 2008. <https://www3.paho.org/hq/dmdocuments/2009/54-VisionSaludInterculturalPL.pdf>.
- [6] Organización de las Naciones Unidas. La situación de los Pueblos Indígenas del Mundo. Nueva York: Departamento de Información Pública de las Naciones Unidas; 2010. http://www.cinu.mx/1informePueblosIndigenas/docs/SituacionPueblosIndigenasMundo_HechosY Cifras_Mundiales.pdf.
- [7] Fondo de las Naciones Unidas para la Infancia. Mater-

- idad Segura y Centrada en la Familia (MSCF) con enfoque Intercultural: Conceptualización e implementación del modelo. Nueva York: Fondo de las Naciones Unidas para la Infancia; 2012. <http://www.codajic.org/sites/www.codajic.org/files/Maternidad%20segura%20y%20centrada%20en%20la%20Familia%20U NICEF.pdf>.
- [8] World Bank. Global Monitoring Report 2005, Millennium Development Goals: From Consensus to Momentum. Washington: World Bank; 2005. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/257411468320347974/global-monitoring-report-2005-millennium-development-goals-from-consensus-to-momentum>.
- [9] Das J, Gertler PJ. Variations in practice quality in five low-income countries: a conceptual overview. *Health Aff.* 2007;26(3):w296-w309.
- [10] González V, Lina A. Análisis comparativo de modelos de atención en salud para población indígena en la región Andina. *Rev Fac Nac Salud Pública* [Internet]. 2015;33(1):07-14. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-386X2015000100002&lng=en.
- [11] Pérez C, Nazar G, Cova F. Facilitadores y obstáculos de la implementación de la política de salud intercultural en Chile. *Rev Panam Salud Publica.* 2016;39(2):122-127. .
- [12] Arce Antezana, IO. La formación del profesional en salud y la incorporación de la interculturalidad en la currícula facultativa. *Gac Med Bol.* 2012;36(1):48-50. .
- [13] Beavis ASW, Hojjati A, Kassam A, Choudhury D, Fraser M, Masching R, et al.. What all students in healthcare training programs should learn to increase health equity: perspectives on postcolonialism and the health of Aboriginal Peoples in Canada. *BMC Med Educ* [Internet]. 2015 [citado el 3 Dic 2025];15:155. <http://doi.org/10.1186/s12909-015-0442-y>.
- [14] Langdon EJ, Garnelo L. Articulation between health services and “indigenous medicine”: anthropological reflections on policies and reality in Brazil. *Salud Colectiva.* 2017;13(3):457-470.
- [15] Mignone J, Bartlett J, O’Neil J, Orchard T. Best practices in intercultural health: five case studies in Latin America. *J Ethnobiol Ethnomed.* 2007;3(1).
- [16] Freire Ávila ND, López Celi PA, Chocho Tene NF, Barrera Vallejo JJ, Jara Zúñiga AY. Impacto de la aplicación de la norma técnica ESAMyN en la reducción de incidencia de cesáreas y fomento del parto humanizado en libre posición. *Cienc Lat Rev Cient Multidiscip.* 2024;8(6), 4870-4886. https://doi.org/10.37811/cl_rcm.v8i6.15209.
- [17] Pontes ALM, Ventura Santos R. Health reform and Indigenous health policy in Brazil: contexts, actors and discourses, *Health Policy Plan.* 2020;35(Supplement_1):i107-i114., <https://doi.org/10.1093/heapol/czaa098>.
- [18] Quattrocchi P, Güémez Pineda M. El modelo intercultural en el campo de la salud reproductiva: una experiencia de investigación aplicada en Yucatán, México. *Temas Antropol.* 2011;33(1):53-71.
- [19] Lowell A, Kildea S, Liddle M, Cox B, Paterson B. Supporting aboriginal knowledge and practice in health care: lessons from a qualitative evaluation of the strong women, strong babies, strong culture program. *BMC Pregnancy Childbirth* [Internet]. 2015. <http://doi.org/10.1186/s12884-015-0433-3>.
- [20] Australian Human Rights Commission. Study on the right to health and Indigenous Peoples. Australian Human Rights Commission; 2016. <https://www.ohchr.org/sites/default/files/NewZealandHumanRightsCommission.pdf>.
- [21] Commonwealth of Australia. Department of the Prime Minister and Cabinet. Closing the Gap Prime Minister’s Report 2016. Canberra: Commonwealth of Australia; 2016. <https://www.indigenousjustice.gov.au/resources/closing-the-gap-prime-ministers-report-2016/>.
- [22] Lavoie J, Gervais L, Toner J, Bergeron O, Thomas G. The Aboriginal health legislation and policy framework in Canada. Prince George, BC: National Collaborating Centre for Aboriginal Health; 2011. <https://www.nccih.ca/docs/context/FS-HealthLegislationPolicy-Lavoie-Gervais-Toner-Bergeron-Thomas-EN.pdf>.
- [23] Humpage L. Cómo abordar el problema de la desventaja de los indígenas en el siglo XXI: La inclusión social y los maoríes en Nueva Zelanda. En: Cimadamore AD, Eversole R, McNeish J-A, editores. *Pueblos indígenas y pobreza: Enfoques multidisciplinares* [Internet]. Buenos Aires: Programa CLACSOCROP; 2006. <http://bibliotecavirtual.clacso.org.ar/ar/libros/crop/indige/S1C6Humpage.pdf>.
- [24] O’Hagan M, Reynolds P, Smith C. Recovery in New Zealand: An evolving concept? *Int Rev Psychiatry.* 2012;24(1):56-63.
- [25] Ministry of Health (NZ). The Guide to He Korowai Oranga: Māori Health Strategy 2014 [Internet]. Wellington: Ministry of Health; 2014. <https://www.health.govt.nz/>.
- [26] Maceira D. *Descentralización y Equidad en el Sistema de Salud Argentino*. Buenos Aires: Centro de Estudios de Estado y Sociedad (CEDES); 2005.
- [27] Maceira D, Palacios A. Estructura, Gestión y Desempeño de Cabeceras de Red Hospitalarias Perinatales: Dos estudios de caso en la Provincia de Buenos Aires. Documento de trabajo. Centro de Estudios de Estado y Sociedad (CEDES). Buenos Aires; 2012. <https://www.danielmaceira.com.ar/wp-content/uploads/2014/07/MaceiraPalacios-WB-RedesPerinatales-final-22oct2012.pdf>.
- [28] Reidpath DD, Allotey P. Measuring global health inequity. *Int J Equity Health.* 2007;6, 16. <https://doi.org/10.1186/1475-9276-6-16>.
- [29] Manor O, Matthews S, Power C. Comparing measures of health inequality. *Soc Sci Med.* 1997;45(5):761-771. doi: [10.1016/s0277-9536\(96\)00412-1](https://doi.org/10.1016/s0277-9536(96)00412-1).
- [30] Dlouhý M. Measuring Geographic inequalities: Dealing with multiple health resources by data envelopment analysis. *Front Public Health.* 2018;6:53. doi: [10.3389/fpubh.2018.00053](https://doi.org/10.3389/fpubh.2018.00053).
- [31] Montenegro RA, Stephens C. Indigenous health in Latin America and the Caribbean. *Lancet.* 2006;367(9525):1859-69. [https://doi.org/10.1016/S0140-6736\(06\)68808-9](https://doi.org/10.1016/S0140-6736(06)68808-9).
- [32] Garza M, Abascal Miguel L. Health disparities among indigenous populations in Latin America: a scoping review. *Int J Equity Health.* 2025;24,119. <https://doi.org/10.1186/s12939-025-02495-2>.
- [33] Anderson I, Robson B, Connolly M, Al-Yaman F, Bjertness E, King A, et al. Indigenous and

- tribal peoples' health (The Lancet-Lowitja Institute Global Collaboration): a population study. *Lancet*. 2016;388(10040):131–157. doi: [10.1016/S0140-6736\(16\)00345-7](https://doi.org/10.1016/S0140-6736(16)00345-7).
- [34] Sandes LFF, Freitas DA, de Souza MFNS, Leite KBS. Primary health care for South-American indigenous peoples: an integrative review of the literature. *Rev Panam Salud Publica*. 2018;42.
- [35] Houghton N, Bascolo E, del Riego A. Socioeconomic inequalities in access barriers to seeking health services in four Latin American countries. PAHO. 2020. <https://iris.paho.org/handle/10665.2/51900>.
- [36] Llamas A, Mayhew S. "Five hundred years of medicine gone to waste"? Negotiating the implementation of an intercultural health policy in the Ecuadorian Andes. *BMC Public Health*. 2018;18:686. <https://doi.org/10.1186/s12889-018-5601-8>.
- [37] Ferdinand A, Lambert M, Trad L, Pedrana L, Paradies Y, Kelaheer M. Indigenous engagement in health: lessons from Brazil, Chile, Australia and New Zealand. *Int J Equity Health*. 2020;19:47. <https://doi.org/10.1186/s12939-020-1149-1>.
- [38] Smink A, Hoek J. Intercultural health practices: towards an equal recognition between indigenous medicine and biomedicine? A case study from Chile. *Health Care Anal*. 2011;19(3):227–41. <https://doi.org/10.1007/s10728-011-0170-3>.
- [39] Snijder M, Shakeshaft A, Wagemakers A, Stephens A, Calabria B. A systematic review of studies evaluating Australian indigenous community development projects: the extent of community participation, their methodological quality and their outcomes. *BMC Public Health*. 2015;15,1154. <https://doi.org/10.1186/s12889-015-2514-7>.