Integrative Health and Sciences. 2025; 2(2):60
doi: 10.63688/ihs.v2.i2.60

ORIGINAL

Self-care practices, traditional medicine, and barriers to healthcare access in rural communities of Ecuador and Bolivia: a comparative qualitative study

Prácticas de autocuidado, medicina tradicional y barreras de acceso a servicios de salud en comunidades rurales de Ecuador y Bolivia: estudio cualitativo comparativo

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Submitted: 02-07-2025 | Revised: 20-07-2025 | Accepted: 09-10-2025 | Published: 17-10-2025

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ABSTRACT

Introduction: In rural communities, access to health services is shaped by territorial, economic, organizational, and cultural factors that also influence self-care practices. Objective: To analyze self-care practices, the use of traditional medicine, and perceived barriers to healthcare access among residents of rural communities in Guayas, Ecuador, and the municipality of El Alto, Bolivia. Methods: A qualitative, descriptive, interpretive, comparative, cross-sectional study was conducted. A convenience sample of 180 adults participated, with 90 from each country. Semi-structured interviews and non-participant observation were used, and the instruments were reviewed by five experts. Information was examined through thematic analysis and cross-context comparison. Results: The analysis was organized into six categories: everyday self-care, traditional medicine, professional care seeking, geographic barriers, economic and organizational barriers, and experiences with health services. Household practices were used as an initial response to symptoms perceived as mild, whereas persistence or worsening of symptoms encouraged professional care seeking. Mobility constraints, indirect costs, and service availability were present in both settings, while traditional medicine was more visible in the narratives from the Bolivian communities studied. Conclusions: Care decisions were shaped by the interaction of territorial conditions, household resources, previous experiences, and traditional knowledge; therefore, rural access requires responses adapted to each community context.

Keywords: rural health; self-care; traditional medicine; health services accessibility; qualitative research.

RESUMEN

Introducción: En las comunidades rurales, el acceso a los servicios sanitarios está condicionado por factores territoriales, económicos, organizacionales y culturales que también influyen en las prácticas de autocuidado. Objetivo: Analizar las prácticas de autocuidado, el uso de medicina tradicional y las barreras percibidas para acceder a servicios de salud entre habitantes de comunidades rurales del Guayas, Ecuador, y del municipio de El Alto, Bolivia. Métodos: Estudio cualitativo, descriptivo, interpretativo y comparativo, de corte transversal. Participaron 180 adultos seleccionados por conveniencia, 90 por país. Se emplearon entrevistas semiestructuradas y observación no participante; los instrumentos fueron revisados por cinco expertos. La información se examinó mediante análisis temático y comparación entre contextos. Resultados: El análisis se organizó en seis categorías: autocuidado cotidiano, medicina tradicional, búsqueda de atención profesional, barreras geográficas, barreras económicas y organizacionales, y experiencia con los servicios. Las prácticas domésticas funcionaron como respuesta inicial ante molestias consideradas leves, mientras que la persistencia o agravamiento de los síntomas favoreció la búsqueda de atención profesional. Las barreras de movilidad, costos indirectos y disponibilidad de servicios estuvieron presentes en ambos contextos, con mayor visibilidad discursiva de la medicina tradicional en las comunidades bolivianas estudiadas. Conclusiones: Las decisiones de cuidado se configuraron por la interacción entre condiciones territoriales, recursos familiares, experiencias previas y conocimientos tradicionales, por lo que el acceso rural requiere respuestas adaptadas a cada contexto comunitario.

Palabras clave: salud rural; autocuidado; medicina tradicional; accesibilidad a los servicios de salud; investigación cualitativa.

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INTRODUCTION

Continuous access and hours are one of the necessary conditions for prevention, treatment, and continuity of care. However, the conditions of access are not evenly distributed throughout the territory, and rural communities face significant difficulties due to the geographical dispersion of rural areas, the scarce supply of transportation, the erratic availability not only of professionals but also of medicines, the latent costs of traveling, and sociocultural differences that can make the decision to seek professional care an obstacle. In the Americas, these difficulties are described precisely as barriers that require specific responses for agricultural populations[1].

In Latin American rural areas, structural factors are combined with local forms of care organization. A recent study on rural nursing in the region indicates that professionals work in scenarios marked by adverse socioeconomic conditions, limited resources, and the need to adapt to diverse community contexts([2]). This reality is relevant because seeking care depends not only on the existence of a health facility, but also on the effective possibility of reaching it, of being attended to in a timely manner, and of maintaining continuity of treatment. In the case of Ecuador, qualitative evidence has shown that barriers to access in rural areas can be financial, structural, and cognitive. Brusnahan et al. observed difficulties in rural communities in the south of the country related to the cost of medicines, transportation, work and family responsibilities, scheduling appointments, and understanding health information([3]). Other studies conducted over the course of the pandemic showed that problems in the supply of medicines, declining incomes, and reorganization of services affected the continuity of care for people with chronic diseases, including people living in rural areas([4]). This background indicates that barriers can accumulate and affect each household differently.

The Ecuadorian system has launched strategies aimed at bringing primary care closer to populations with access difficulties. The Médico del Barrio strategy, implemented through mobile teams that conducted home visits in marginalized areas, demonstrated favorable effects on some preventive and diagnostic indicators, although the observed results varied according to the type of care analyzed[5]. At the same time, research on inequalities in the use of services has documented transformations during health reforms, although it has also shown that socioeconomic conditions continue to influence disparities in access to services[6]. Therefore, coverage and effective access must be analyzed as dimensions that are linked but not equivalent.

The cultural dimension is particularly relevant in territories where biomedical knowledge coexists with traditional practices. Ecuadorian Indigenous healers identified both opportunities for cooperation with the formal system and barriers related to recognition, communication, and differences in conceptions of health and disease, according to Bautista-Valarezo et al.[7]. In this context, self-care can include family practices, the use of medicinal plants, home remedies, and decisions about when professional consultation is considered necessary.

In Bolivia, the use of traditional medicine and medicinal plants is part of diverse sociocultural contexts. Justo-Chipana and Moraes documented, through semi-structured interviews, knowledge and uses of medicinal plants commercialized by chifleras in La Paz and El Alto[8]. In Yuracaré communities of the TIPNIS, extensive knowledge and use of medicinal plants within community health practices have also been recorded[9]. These investigations do not allow us to assume that the same practices are present in the same way in all Bolivian communities, but they show the validity of traditional knowledge within the country.

Rural access difficulties in Bolivia have also been addressed from the perspective of users' experiences. Among patients with leishmaniasis in rural areas, Eid et al. found that symptom severity and impaired daily functioning drove the pursuit of biomedical care, while accessibility barriers contributed to pathways between traditional medicine and public services[10]. Although this finding pertains to a specific disease, it is useful for understanding that care-seeking may occur gradually and be conditioned by factors beyond cultural preference.

Intercultural models attempt to bring different knowledge systems closer, although their practical articulation presents challenges. Torri and Hollenberg analyzed a Bolivian experience in which traditional medicine and biomedical care coexisted within an intercultural framework, highlighting difficulties in achieving balanced recognition between both systems (11). In addition, studies on cultural practices related to medicinal plant use in other Andean contexts show that these resources continue to be part of family strategies for addressing health problems (12).

Despite the existence of studies on rural access, traditional medicine, and interculturality, qualitative research that jointly analyzes these dimensions in communities in Ecuador and Bolivia through contextual comparison is less frequent. Exploring the experiences of inhabitants themselves makes it possible to identify how domestic resources, traditional knowledge, mobility

conditions, costs, and previous experiences with services are combined.

Based on the foregoing, this study aimed to analyze self-care practices, the use of traditional medicine, and perceived barriers to accessing health services among inhabitants of rural communities in Guayas, Ecuador, and the municipality of El Alto, Bolivia, using semi-structured interviews and non-participant observation.

METHODS

An empirical study was conducted using a qualitative approach with a descriptive and interpretive scope and a cross-sectional comparative design. The study aimed to understand self-care practices, the use of traditional medicine, and perceived barriers to accessing health services based on the experiences of inhabitants of rural communities in Ecuador and Bolivia.

The study was conducted in two geographical contexts. In Ecuador, rural settlements in the province of Guayas were included, which are characterized by dispersed settlement patterns and the need to travel to parish or cantonal seats for certain services. In Bolivia, rural communities linked to the municipality of El Alto, department of La Paz, were included. The selection of both contexts was based on the interest in examining territories where self-care practices, traditional knowledge, and the use of formal care services coexisted.

The population of interest was made up of adults residing in the selected communities. We worked with 180 participants, 90 from Ecuador and 90 from Bolivia, selected through non-probabilistic convenience sampling. The sample size was not established for statistical representativeness purposes, but to incorporate diversity of experiences in both contexts. People aged 18 years or older, with habitual residence of at least one year in the community and voluntary willingness to participate were included. Temporary visitors, people who could not complete the interview, and those who did not agree to participate were excluded.

Data were collected through a semi-structured interview and non-participant observation. The interview guide explored daily self-care practices, the use of home remedies and medicinal plants, criteria for seeking professional care, previous experiences with services, and economic, geographic, organizational, or cultural difficulties. The observation form recorded environmental conditions related to mobility, physical accessibility, the visible availability of transportation, road characteristics, and relative proximity to health services.

The interview guide and the observation form were submitted to 5 experts for judgment; these experts had experience in community health, primary care, and qualitative research. The review considered the clarity, relevance, coherence, and correspondence of each element with the study objectives and categories. Their observations were incorporated before final administration. Because these were qualitative tools, internal consistency coefficients designed for psychometric scales were not used.

The interviews were organized into analysis matrices and examined through thematic analysis. In the first phase, the material was read in full to become familiar with the accounts; subsequently, units of meaning and initial codes were identified. Conceptually related codes were grouped into categories and subcategories. The analysis was first conducted within each national context and then comparatively, identifying convergences and differences without making statistical inferences between groups.

Observation records were cross-checked against the interview contents as a technique triangulation strategy. Alphanumeric codes without identifiable information were used to present testimonies. Interpretation focused on identifying recurring patterns, divergent cases, and contextual elements relevant to understanding care decisions.

Participation was voluntary, and anonymity and confidentiality were respected. Before each interview, the study purpose, the scientific use of the data, and the right to withdraw without consequences were explained. No names or direct identifiers were recorded.

RESULTS

The analysis was organized into 6 central categories: daily self-care practices, traditional medicine, criteria for seeking professional care, geographic barriers, economic and organizational barriers, and experiences with services. The identified patterns showed common elements between the 2 contexts, although differences existed in the visibility of traditional practices and in how territorial conditions affected travel.

Self-care appeared as an initial response to discomforts considered mild or known. The narratives included rest, temporary dietary modifications, increased fluid intake, herbal infusions, medicinal plants, and the use of medications previously available at home. The continuity of these measures depended on the perception of severity, previous experience with similar symptoms, and the possibility of traveling to a health facility.

In both contexts, the persistence or worsening of symptoms marked a transition point toward seeking professional care. Family knowledge played a relevant role in the selection of initial measures, especially in practices transmitted between generations. In Ecuador, references to home remedies and family care predominated; in Bolivia, in addition to these strategies, narratives gave greater visibility to medicinal plants and traditional knowledge of community use.

Table 1. Categories and main findings from the qualitative analysis

Category	Synthesis of the finding
Daily self-care	Rest, hydration, dietary changes, home remedies, and resources available at home.
Traditional medicine	Use of plants, infusions, and family or community knowledge as part of initial management.
Care-seeking	Professional consultation in the event of persistence, worsening, or lack of improvement with home measures.
Geographic barriers	Distance, irregular transportation, road conditions, and travel time.
Economic and organizational barriers	Mobility and medication costs, loss of working hours, schedules, shifts, and availability.
Experience with services	Importance of interpersonal treatment, clarity of information, waiting times, and resolution capacity.

Note. Findings were organized into thematic categories based on patterns identified in the interviews and observations.

The use of medicinal plants and traditional preparations was present in the 2 contexts. Participants associated these practices with digestive and respiratory discomfort, muscle pain, and other problems perceived as manageable at home. In the recintos of Guayas, these practices were described mainly as family knowledge; in the rural communities of El Alto, they featured more prominently in narratives about daily care.

Traditional medicine was not necessarily described as an exclusive alternative to formal care. Across the different accounts, a sequence of care was observed in which domestic measures were initially used and professional consultation was incorporated when symptoms persisted or were perceived as more severe.

Access barriers were expressed as a multidimensional phenomenon. Distance to facilities was combined with irregular transport availability, indirect costs, and organizational limitations. In the rural settlements of Guayas, the need to travel to parish or cantonal seats for certain services was described. In the Bolivian context, the difficulties were associated with travel between rural communities and areas with a higher concentration of services.

Transportation costs, the purchase of medications, and the temporary loss of work activities were mentioned as factors that could delay consultation. Service hours, waiting times, staff availability, and the need to travel to facilities with greater resolving capacity added to these difficulties.

Table 2. Contextual Comparison of the Main Findings

Dimension	Guayas, Ecuador	El Alto, Bolivia
Initial self-care	Home remedies, rest, infusions, and medications available at home.	Domestic care combined with medicinal plants and traditional knowledge.
Transmission of knowledge	Family and intergenerational predominance.	Family and intergenerational, with greater community visibility in the narratives.
Geographic access	Travel to parish or cantonal seats.	Travel from rural communities to areas with a greater concentration of services.
Economic barriers	Transportation, medications, and temporary loss of productive activities.	Transport, medications, and costs associated with travel.
Relationship between care systems	Complementarity between domestic practices and formal care.	More explicit coexistence between biomedical care and traditional medicine.

Note. The comparison is qualitative and contextual; it does not represent a prevalence estimate or a statistical comparison between countries.

Experiences with services were heterogeneous. Participants positively valued clear communication, respectful treatment, and effective problem resolution. Less favorable experiences were related to waiting times, lack of medications, or the need to return on another date. Previous experience influenced subsequent willingness to seek professional care again, although it did not act as an isolated factor.

Table 3. Relationship Between Environmental Conditions and Care Decisions

Condition	Described response	Interpretive implication
Distance to the establishment	Greater initial use of household measures.	Distance can raise the threshold for seeking care.
Limited transport	Dependence on family members or planned travel.	Lower likelihood of immediate consultation.
Associated expenses	Prioritization of consultation for problems perceived as serious.	Indirect costs condition opportunities for access.
Positive experiences	Greater willingness to return to the service.	Trust is built from concrete experiences.
Negative experiences	Greater initial use of domestic alternatives.	Previous experience interacts with other barriers.
Traditional knowledge	Initial or complementary use of plants and preparations.	Coexistence of traditional and biomedical resources.

Note. Interpretations derived from the qualitative patterns.

The findings indicated that care decisions were not attributable to a single factor. The decision to remain temporarily at home or to seek professional care interacted with self-care, traditional knowledge, mobility, economic resources, and previous experience with services. The greater presence of references to traditional medicine in the Bolivian group was interpreted as a discursive difference among the communities studied and not as evidence of a higher prevalence at the national level.

DISCUSSION

The findings show that rural healthcare access must be interpreted as a process in which service availability, territorial conditions, economic resources, care experiences, and cultural knowledge interact. This reading coincides with evaluations conducted in Ecuadorian rural populations, but it requires differentiating what was observed in the present study from the results of previous research carried out in other territories.

Eckhardt et al. qualitatively evaluated the implementation of the Ecuadorian health reform in marginalized populations and described favorable perceptions of some changes in primary care, along with persistent problems related to staff availability, medications, and distance to services13. This background does not imply that these same deficiencies are identically present in the rural settlements studied in Guayas; however, it helps situate the territorial and organizational barriers found within a problem previously documented in rural areas of the country.

Biermann et al. analyzed collaboration between a nongovernmental organization and public services in a remote rural area of Ecuador. The population valued the increase in services positively, but the authors also showed that expectations and trust depended on how care was integrated with existing structures14. In our study, previous experience with services appeared to be linked to willingness to return, although it cannot be stated that it alone determines future behavior; the accounts suggest that it acts alongside distance, costs, and availability.

The intercultural dimension must be interpreted with particular caution. Herrera et al. described Ecuadorian intercultural health as a project marked by asymmetries between models of knowledge and by an incomplete integration of traditional practices15. Gallegos et al., in 2 rural parishes of the central Sierra, found different levels of integration, coexistence, tolerance, and intolerance of traditional practices in pregnancy and childbirth, with variations associated with the local context and with the decisions of professionals16. None of these studies was conducted in the recintos of Guayas included here, so their conclusions are not directly transferable; their usefulness lies in showing that the relationship between traditional medicine and the formal system varies according to territory and actors.

Nugus et al. studied cervical cancer screening in a rural Ecuadorian Indigenous community and observed that participants actively managed their relationship with biomedicine through social networks, previous experiences, and local knowledge, while organizational barriers persisted17.

Although the health problem was specific, this background helps to avoid a simplistic interpretation of self-care as rejection of formal care. In our findings, domestic measures most frequently functioned as an initial response that could be followed by professional consultation when the perception of severity changed.

Regional evidence also indicates that access to primary care among Indigenous populations is conditioned by cultural and organizational factors. Sandes et al., in an integrative review of South American Indigenous peoples, identified the need to strengthen cultural appropriateness, relationships between health teams and communities, and the organization of primary care18. This framework is compatible with the multidimensional interpretation of access observed in the present study, but it does not demonstrate that a specific intercultural intervention is sufficient to resolve the described barriers.

In Bolivia, Barger et al. evaluated a maternal and neonatal intervention supported by community health workers among Indigenous populations of the Andean highlands, designed to improve the reach of services in groups with insufficient access (19). The study focused on maternal and neonatal health and therefore cannot be extrapolated to all rural health needs. However, it shows that community proximity and participation of local actors have been considered operational components for bringing services closer to underserved populations.

In the Ecuadorian context, Aldulaimi and Mora described the reorganization of primary care as a necessary component to improve efficiency and coverage, particularly in rural and underserved populations20. In relation to our results, this prior evidence suggests that increasing formal availability constitutes only part of the response, given that participants also mentioned indirect costs, mobility, and previous experience with services.

Neither should community participation be attributed solely to cultural differences. Aizenberg, when analyzing the participation of Indigenous women in a Bolivian intercultural program, proposed that social networks and community capital could influence participation in health and the use of available resources21. The present study did not assess social capital or empowerment, so it is not appropriate to assume the same mechanisms. Nevertheless, this work helps broaden the interpretation beyond an opposition between traditional culture and modern medicine.

Badanta et al., through a qualitative study with the indigenous population of the Peruvian Amazon, described access problems related to distance, inequalities and availability of resources, in addition to the use of traditional medicine22. Bautista-Gomez et al., in rural indigenous communities in Colombia affected by cutaneous leishmaniasis, identified geographical, economic, sociocultural, and administrative barriers23. Both antecedents come from different countries and health problems, so they are not direct evidence about Ecuador or Bolivia; their coincidence lies in showing that rural barriers tend to accumulate in multiple dimensions.

The relationship between cultural competence and biomedical authority has also been examined in the Peruvian Amazon. Del Mastro observed that culturally competent care policies may be conditioned by the way providers maintained their professional authority and delimited the place of traditional medicine24. This finding is relevant to interpreting the decision of some participants to disclose or not disclose the use of medicinal plants during the consultation. In our case, the data describe perceptions and do not allow direct assessment of the attitudes of health personnel.

Berlowitz et al. explored the perspectives of Amazonian traditional healers and demonstrated the existence of their own concepts regarding health, illness, and healing that may differ from biomedical categories25. This recent evidence, published before the June 2025 bibliographic cutoff, reinforces the need to avoid reducing traditional medicine to a list of plants or remedies. In the present study, however, the aim was not to characterize complete epistemological systems, but to understand the place that traditional practices occupied in everyday care decisions.

Aguilar-Peña et al. pointed out that intercultural health entails recognizing indigenous health models and promoting a relationship between knowledge systems, beyond mere institutional coverage (26). From this perspective, the observed coexistence between self-care, medicinal plants, and formal care can be interpreted as part of a continuum of decisions. This does not imply that all traditional practices are safe or effective; the qualitative design used does not allow for the evaluation of clinical efficacy, doses, interactions, or adverse effects.

Coombs et al., in a qualitative study with rural providers, showed that health access includes social, cultural and programmatic dimensions that are difficult to capture through exclusively quantitative indicators27. Although its context was not Latin American, the approach is useful for the methodological interpretation of our findings: distance or the number of establishments do not explain the access experience alone when acceptability, trust, schedules and adequacy of services intervene.

Ecuadorian literature on medicinal plants has documented a wide diversity of species and ethnomedical uses, although a large part of this evidence focuses on chemical or pharmacological properties and not on health access decisions. Bailon-Moscoso et al. reviewed Ecuadorian medicinal species with anticancer potential and highlighted the country's ethnobotanical richness28. This precedent supports the existence of a plant medicinal heritage, but it should not be used to attribute clinical efficacy to the preparations mentioned by the participants in this study.

The main qualitative difference between the contexts studied was the greater discursive visibility of traditional medicine in Bolivian communities. Given the convenience sampling and the qualitative nature of the study, this result does not allow concluding that traditional medicine is more frequent in Bolivia than in Ecuador. It may reflect territorial differences, participant composition, local history, or different ways of narrating care. Likewise, the comparison between Guayas and El Alto should be understood as contextual and not as a representative comparison between national health systems.

Limitations include the non-probabilistic selection of participants, the reliance on self-reported experiences, and the impossibility of objectively verifying, through this design, all travel times, costs, medication availability, or the actual frequency of the practices described. The breadth of the qualitative sample made it possible to include a diversity of experiences, but it is not a substitute for the criteria of statistical representativeness. The observation provided context for triangulation, although it does not eliminate possible recall or social desirability biases.

Based on these results, strategies aimed at improving rural access should consider mobility, indirect costs, continuity of care, communication between users and professionals, and cultural practices present in each territory. This statement is an interpretive implication of the study, and not a demonstration of the effectiveness of a specific intervention.

CONCLUSIONS

Self-care practices constituted a usual response that occurs frequently in situations of health problems perceived as mild, based on one set of resources available at home, the practice of rest, the practice of dietary modifications, the practice of drinking herbal infusions, and the practice of using medicinal plants until before the assessment of the need for a professional consultation.

The specific access barriers found were mainly related to distance, the availability of transport alternatives over time, the quantification of indirect costs, the availability of service hours, the availability of medications, and experiences with healthcare facilities.

Traditional medicine was present in both contexts, being more evident in the narratives from the rural communities of El Alto. In this vein, its use does not necessarily appear as a substitute resource for biomedical care, but rather as a resource that formed part of sequences of care that could combine domestic-type resources with formal service provisions.

The contextual comparison showed that healthcare-seeking decisions were conditioned by territorial, economic, cultural, and organizational circumstances; therefore, responses aimed at dignifying rural access must be adapted to the particular characteristics of each community, without generalizing across countries.

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FUNDING

None.

CONFLICT OF INTEREST

Does not exist.

AUTHORSHIP CONTRIBUTIONS

Conceptualization: Rosa Cobeña Tallado.
Methodology: Rosa Cobeña Tallado.
Research: Rosa Cobeña Tallado.
Writing – original draft: Rosa Cobeña Tallado.
Writing – review and editing: Rosa Cobeña Tallado.