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The South American Cannabis Route: Immersive Ethnography of Consumption, Markets, and Sociopolitical Disputes on the Pacific Coast

La ruta sudamericana del cannabis: una etnografía inmersiva del consumo, los mercados y las disputas sociopolíticas en la costa del Pacífico

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ABSTRACT

Introduction: This study analyzes the social, territorial, economic, and political dynamics associated with cannabis through an ethnographic journey across cities on the South American Pacific coast. These practices are examined as specific historical, moral, institutional, and geographical configurations. **Objective:** To comparatively characterize how recreational cannabis consumption practices, markets, and sociopolitical disputes are configured in cities in Chile, Peru, Ecuador, and Colombia. **Methodology:** An immersive, multi-sited ethnography was conducted between February and May 2026, combining participant and non-participant observation, informal interviews, and field conversations. The corpus included interactions with 59 people connected to cannabis scenes and records from urban, commercial, institutional, and border settings. Information was organized through thematic coding and cross-city comparison. **Results:** The findings revealed differentiated configurations. Chile combined social tolerance with discretionary control; Peru showed discretion, stigma, and closed networks; Ecuador displayed formal, gray, and informal circuits; and Colombia stood out for high visibility and regulatory contestation. Market formalization and social normalization did not necessarily move in the same direction. **Conclusions:** Cannabis constitutes a relational and territorially variable social object. Its everyday regulation depends on trust networks, local moralities, commercial infrastructure, formalization capacities, and situated forms of state control. Public policies should recognize these differences and avoid uniform regulatory models.

Keywords: Cannabis; Ethnography; Regulation; Harm reduction.

RESUMEN

Introducción: Este estudio analiza las dinámicas sociales, territoriales, económicas y políticas asociadas al cannabis a través de un viaje etnográfico por ciudades de la costa del Pacífico sudamericana. El problema se aborda partiendo de la premisa de que las prácticas de consumo, los mercados y las formas de control no se distribuyen de forma homogénea, sino que dependen de configuraciones históricas, morales, institucionales y geográficas específicas. **Objetivo:** Caracterizar comparativamente cómo se configuran las prácticas, mercados y disputas sociopolíticas de consumo recreativo de cannabis en ciudades de Chile, Perú, Ecuador y Colombia.

Método: Se llevó a cabo una etnografía inmersiva y multi-ubicada entre febrero y mayo de 2026, combinando observación de participantes y no participantes, entrevistas informales y conversaciones de campo. El corpus incluyó interacciones con 59 personas vinculadas de forma diferente a escenas y registros del cannabis, procedentes de entornos urbanos, comerciales, institucionales y fronterizos. La información se organizó mediante codificación temática y comparación entre ciudades. **Resultados:** Los hallazgos revelaron configuraciones diferenciadas. Chile combinó la tolerancia social con el control discrecional; Perú mostró mayor discreción, estigma y acceso a través de redes cerradas; Ecuador mostró circuitos formales, grises e informales superpuestos; y Colombia destacó por su alta visibilidad pública, densidad organizativa y disputa regulatoria. La formalización del mercado y la normalización social no necesariamente avanzaron en la misma dirección. **Conclusiones:** El cannabis constituye un objeto social relacional y territorialmente variable. Su regulación diaria depende de redes de confianza, moralidades locales, infraestructuras comerciales, capacidades de formalización y control estatal. Las políticas públicas deberían reconocer estas diferencias y evitar modelos regulatorios uniformes.

Palabras clave: Cannabis; Etnografía; Regulación; Reducción de daños.

INTRODUCCIÓN

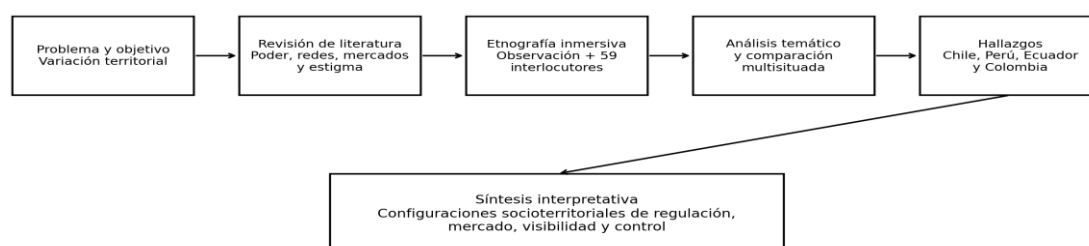
Thinking about cannabis from a recreational perspective may initially seem straightforward. One might assume that consumption and modes of use are relatively similar everywhere, as though there were a universal model of user, market, and conflict. Field experience along the South American Pacific coast reveals something quite different: each city, border, and neighborhood proposes a specific way of relating to the plant, its derivatives, and the people who consume them. This study follows an ethnographic route from Puerto Montt in southern Chile to Cartagena de Indias in Colombia, crossing a series of cities in Chile, Peru, and Ecuador.

The route makes it possible to observe how political history, public morality, geography, social stratification, and regulatory frameworks combine to produce local arrangements of tolerance, persecution, markets, and institutional silences surrounding cannabis. Contemporary regulation shows that legalization does not automatically replace previous circuits and that expected and unexpected effects depend on institutional implementation, available supply, and specific access rules. The Uruguayan experience illustrates this complexity, while recent Latin American debates show that the diffusion of reforms responds to social mobilization, government priorities, and tensions between public health and security. Consequently, the categories of legality and illegality are insufficient by themselves to explain the everyday life of cannabis markets (1,2,3,4).

In Chile, Peru, Ecuador, and Colombia, comparative evidence remains fragmented when the aim is to understand consumption, circulation, stigma, control, and market organization together. Recent reviews indicate that legal availability can modify access patterns and health outcomes, but its effects depend on regulatory restrictions, outlet density, and population characteristics. In Chile, longitudinal analysis of cannabis policies showed heterogeneous effects by sex, territory, and social conditions, reinforcing the need to examine reforms in specific contexts. This gap gives rise to the research question: how are recreational cannabis consumption practices, markets, and sociopolitical disputes territorially configured in cities along the South American Pacific coast? (5,6).

The article develops an analytical sequence connecting the problem, literature, method, findings, and discussion. The literature review brings together power, networks, illicit markets, stigma, and regulation. The methodology specifies the logic of immersive ethnography, the settings visited, interlocutors, recording, coding, and cross-city comparison. Results are organized by country and subsequently synthesized through comparative axes of consumption visibility, market formality, and state control. The discussion interprets these differences as socioterritorial configurations rather than variations of a single regional model. The conclusions address the general objective and derive implications for public policies sensitive to local conditions.

Figure 1. Analytical structure of the article



Note. The figure summarizes the sequence connecting the research problem, theoretical foundation, ethnographic strategy, comparative analysis, and socioterritorial interpretation of the findings.

LITERATURE REVIEW

Power, regulation, and the everyday governance of cannabis

Cannabis regulation can be understood as a process of governance that distributes permissions, restrictions, tolerances, and capacities for action among actors and territories. Recent literature on illicit markets emphasizes that formal rules interact with organizations, networks, and institutions that shape exchange and the everyday implementation of policy. Bogren and Castillo show that analysis of drug markets gains explanatory capacity when it incorporates the organizational dimension rather than being limited to interpersonal relationships. In turn, studies of cannabis implementation in Uruguay demonstrate that gaps between policy design and implementation can produce unintended outcomes, including circuits located between legal and illegal markets (7,8).

This relational perspective is useful for comparing cities subject to similar regulatory frameworks but governed differently in practice. The transition between unregulated and regulated markets depends on price, quality, convenience, trust, and perceived safety. Donnan et al. found that purchasing experiences influence the decision to move toward legal channels, while Maillet showed that younger and more frequent consumers remain more likely to use illicit sources. In Uruguay, analysis of revenues and economic opportunities in the legal market confirms that modes of supply, costs, and institutional structure influence the regulated system's capacity to attract consumers and sustain alternatives to the informal market (9,10,11).

Trust networks, exchange, and market organization

Cannabis markets do not function as impersonal aggregates of buyers and sellers, but as circuits in which access, reputation, price, trust, and regulation interact. Recent research on Uruguayan gray markets shows that legalization can generate intermediate modes of exchange that do not fit a simple legal-versus-illegal opposition. Studies of consumer transition in Canada reach a compatible conclusion: even with a broad network of licensed retailers, part of demand continues to use unregulated dealers, stores, or websites. This persistence suggests that policy must consider the attributes users value and the barriers they face when changing supply channels (8,9,10).

The economic dimension adds another layer. Uruguay's legal market combines state intervention, pharmacies, home cultivation, and cannabis social clubs, and its evolution shows that different access mechanisms can coexist for long periods. Recent evidence documents that clubs maintain institutional stability and make a relevant contribution to legal supply, while economic analysis of the regulated market shows differentiated opportunities and constraints for commercial and non-commercial actors. These findings allow smoke shops, grow shops, associations, growers, and intermediaries observed during fieldwork to be interpreted as components of hybrid ecosystems whose operation depends on both official rules and organizational practices and trust relationships (2,11).

Latin American regulation and the persistence of hybrid markets

The Latin American experience shows that regulatory reform does not immediately replace previous practices or produce a homogeneous market. Durán-Martínez and Fakhoury demonstrate that elite and citizen preferences regarding legalization may differ, while Rivera-Vélez and Díaz show that medical cannabis reforms in Colombia and Argentina are transformed during implementation and can produce policy paradigms different from those initially anticipated. In Peru, Wong-Salgado et al. describe a developing regulatory and scientific field conditioned by institutional requirements, access, and research capacities. In Chile, Castillo-Carniglia situates substance use and policy within a national profile characterized by regulatory change and persistent public-health challenges (12,13,14,15).

Colombia offers an additional setting of social and political dispute. Del Rio Forero et al. found heterogeneous positions toward cannabis-control policies, while Bedoya Sandoval et al. documented variability in knowledge and attitudes about medical cannabis among students in health professions. These results suggest that the legitimacy of cannabis depends not only on legal rules but also on professional frameworks, beliefs about risk, experiences of use, and citizen positions. Comparative evidence indicates that reform implementation is mediated by actors with different resources and expectations; therefore, urban comparison must simultaneously observe formal rules, market behavior, and the social interpretations accompanying each regulatory transformation (16,17).

Stigma, public morality, and urban visibility

Stigma transforms a consumption practice into a moral classification of people, spaces, and social groups. Müller and Rasmussen show that cultural stigmatization can intersect with police-control practices and gender inequalities, while Ferreyra and Mosqueira emphasize that religion and morality shape attitudes toward drugs in Latin America. Recent literature on cannabis stigma confirms that

negative perceptions are not uniform and depend on institutional and cultural context. Bathish et al. further warn that academic language itself can reproduce stigma when it uses generalizing or moralizing categories. These contributions justify analyzing the urban visibility of consumption as an outcome of norms, reputations, and social expectations, rather than only of formal prohibitions (18,19,20).

Research on anti-stigma interventions shows that public representations of people who use drugs influence rejection, access to services, and social legitimacy. Holland et al. identified substantial heterogeneity in how stigma is conceptualized and measured, requiring caution in comparisons across territories. Santos et al. documented patterns of cannabis use and polysubstance use that demonstrate the diversity of user profiles, while studies of experimental regulatory models such as Züri Can emphasize that harm-reduction-oriented regulation must consider not only the legality of supply but also information, consumption practices, and conditions of access. Territorial ethnography therefore examines where and how a practice becomes visible and which institutional responses it activates (21,22,23).

Immersive ethnography, sensitive markets, and reflexivity

Multi-sited ethnography makes it possible to follow practices, discourses, and circuits across different places without assuming that each site constitutes an isolated unit. Vanke proposes updating multi-sited ethnography through strategies capable of integrating data produced in multiple settings, while Prasad and Shadnam argue that this approach helps balance comparative breadth and interpretive depth. Warren and Gibson further emphasize that following processes across different places makes it possible to build explanations connecting local experiences with broader institutional transformations. These contemporary methodological developments support a strategy combining observation, conversation, and movement through everyday settings to study how actors produce trust, interpret risks, and negotiate boundaries of legality (28,29,30).

Immersion requires reflexivity and an explicit analytical procedure. DeJonckheere et al. recommend clearly describing how thematic analysis is conducted, its integration decisions, and the relationship between categories and research questions. Naeem et al. propose a systematic sequence for moving from codes to themes and conceptual models, while Byrne shows how the reflexive approach can be applied transparently. Olmos-Vega et al. emphasize that reflexivity requires continuous examination of how the researcher's position, context, and decisions influence the process. In this study, these orientations were used to maintain traceability among observations, transcripts, codes, territorial comparisons, and final interpretation (24,25,26,27).

Conceptual synthesis and research gap

The reviewed literature converges on a central idea: cannabis scenes are configured through the interaction of regulation, market organization, stigma, availability, and territoriality. Recent studies from Uruguay show that regulated policy can simultaneously generate stable legal markets, gray circuits, and institutional adjustments; evidence from Canada confirms that the transition to the legal market is substantial but incomplete; and Latin American studies indicate that implementation is mediated by actors, institutions, and political preferences. These dimensions are often analyzed

separately or at the national level, limiting understanding of internal variations among cities, borders, tourist areas, and metropolitan centers (1,3,8,15).

The gap addressed by this study lies at the comparative urban scale of the South American Pacific coast. Available research provides solid evidence on regulation, attitudes, markets, and risks, but fewer ethnographic studies simultaneously connect consumption visibility, market formality, stigma, and state control across multiple cities in Chile, Peru, Ecuador, and Colombia. Combining multi-sited ethnography, thematic analysis, and reflexivity makes it possible to examine this articulation without converting qualitative differences into population measurements. The contribution of the study is therefore to identify comparable socioterritorial configurations and explain how local practices, access networks, and institutional responses produce differentiated cannabis scenes (24,30).

METHOD

Ethnographic design and field route

The research adopted a qualitative, ethnographic, immersive, and multi-sited approach. Fieldwork was conducted between February and May 2026 through a route across cities on the South American Pacific coast, from Puerto Montt in Chile to Cartagena de Indias in Colombia, including urban and border areas in Chile, Peru, Ecuador, and Colombia. The multi-sited logic made it possible to follow practices, discourses, and circuits related to consumption, commercialization, and regulation in different contexts without assuming equivalence among cities. The comparison sought to identify local configurations of visibility, formality, stigma, and state control, following contemporary criteria for multi-sited ethnography that articulate contextual depth and comparison across sites (28,29,30).

The strategy combined participant and non-participant observation in squares, parks, tourist neighborhoods, commercial areas, transport stations, smoke shops, grow shops, dispensaries, and semi-clandestine spaces where flower, extracts, and edibles circulated. Immersion involved temporarily inhabiting some settings, moving along routes used by consumers and sellers, and participating in everyday situations when conditions of trust and safety allowed. This proximity facilitated access to practices that are difficult to observe externally, but required maintaining a reflexive stance toward the researcher's influence. The analytical interest focused on understanding relationships, meanings, and forms of everyday regulation rather than estimating population prevalence.

Interlocutors and selection strategy

The corpus included conversations, informal interviews, and interaction records with 59 people connected in different ways to the cannabis scenes observed. Recreational and medical consumers, non-consumers, informal sellers, growers, shop owners, activists, health professionals, academics, institutional actors, police officers, and security guards were included. Selection was purposive and sought diversity of positions within the field; it therefore did not aim for statistical representativeness. Analysis remained at an aggregate level to protect interlocutors exposed to legal, occupational, or reputational risks and to prevent the combination of city, occupation, and practice from indirectly identifying specific individuals.

The identification of actors and spaces was supported by a typology constructed from the researcher's previous experience in Mexican cannabis marches, where consumers, sellers, activists, health professionals, and authorities converge. This typology served as a guide for locating functionally comparable positions in each city without requiring all actor types to be present in every context. The strategy favored contrast among perspectives on legitimacy, risk, trade, surveillance, and access. The unit of interest was not the isolated individual, but the relationship among actors, spaces, and rules within each local scene. Conversations were therefore interpreted together with observations and territorial records.

Recording, transcription, and coding

The thematic analysis used mixed coding. An initial set of codes was derived from a priori axes, including consumption visibility, market formality, state control, and stigma; a second set was constructed inductively from patterns emerging in transcripts and notes. The procedure followed recent recommendations for documenting the transition among data segments, codes, categories, and themes while maintaining an explicit link with the study questions. Constant comparison across cities made it possible to identify regularities, contrasts, and exceptions, while reflexivity was used to document interpretive decisions. Coding supported a systematic and traceable interpretation rather than serving as a quantitative substitute for ethnographic density (24,27).

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Ethical considerations and confidentiality safeguards

The ethical procedure was adapted to the level of risk associated with each type of interlocutor and to the specific conditions of fieldwork. With informal sellers, police officers, and security guards, contact took the form of private conversation and identifiable information was not recorded because of potential legal or reputational risks. With health professionals and institutional actors, recorded verbal consent was obtained after explaining the objectives, academic use of the information, and guarantees of anonymity. Participation was voluntary, and individuals could end the conversation or avoid specific topics. Identity protection took precedence over providing individualized descriptions when such descriptions could increase the possibility of recognition.

To gain access to certain institutions, official letters and formal emails were sent requesting authorization to speak with personnel connected to the topic. The manuscript does not publish the names of private interlocutors and uses general references to positions or settings when identification could have consequences. Information from informal conversations was contrasted with direct observation and public documents whenever possible. Ethical treatment of the material recognized

that cannabis involves practices subject to different degrees of social and legal sanction depending on the territory. For this reason, decisions about recording, transcription, quotation, and contextualization considered the balance among descriptive density, analytical usefulness, and protection of participants.

Reflexivity and construction of comparative axes

The comparative axes of consumption visibility, market formality, and state control were constructed from coded segments and observation records. Cross-site comparison followed a multi-sited logic aimed at identifying patterns that traverse places without erasing their particularities. The type of consumption observed, presence of establishments, access modalities, mentions of police or institutional intervention, and relationships among actors were integrated. The resulting positions were ordinal and qualitative-comparative; therefore, the indices were used only as a visual synthesis of relative differences and not as standardized measurements. This strategy is consistent with contemporary approaches to multi-sited ethnography and reflexive analysis emphasizing traceability, context, and interpretive construction (28,30).

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RESULTS

Chile: social tolerance and discretionary control

In the Chilean cities visited, cannabis consumption showed relatively broad social tolerance that coexisted with regulatory restrictions and discretionary forms of control. Recent national evidence describes a cannabis policy characterized by tensions among sanction, consumption, and prevention, and the analysis by Nazif-Munoz et al. shows that two decades of implementation have produced heterogeneous effects according to sex, region, and social conditions. Castillo-Carniglia also notes that Chile's profile of consumption and policy requires regulation, associated problems, and health responses to be interpreted jointly. Direct observation in Santiago, Puerto Montt, and Valdivia recorded visible consumption in specific spaces; this visibility is interpreted as localized social normalization rather than general legality (6,15).

Pucón and Frutillar showed a different configuration associated with their tourist and family-oriented character. Consumption was present but tended to shift toward homes, tourist apartments, and less exposed places where the practice could remain outside public view. This form of tolerated but concealed consumption demonstrates that everyday regulation is also constructed through moral

codes concerning the image of the city and expected behavior in its spaces. In these contexts, formal legality alone does not explain visibility. Acceptance depends on who consumes, where consumption occurs, and how the practice relates to local expectations regarding coexistence, tourism, and public order.

At least one cannabis-related store was identified in every Chilean city visited, mainly smoke shops or grow shops, although formal sales of dried flower were scarcely visible. Access to flower depended primarily on informal networks, personal contacts, and digital platforms used to connect buyers with suppliers. Recent literature on transitions between regulated and illicit markets shows that consumers continue to use informal channels when they perceive advantages in price, availability, trust, or convenience. Valparaíso reproduced this logic through networks associated with nightlife spaces and trusted intermediaries, while Viña del Mar showed less street consumption and greater dependence on specific contacts (8,10).

Valdivia showed the contraction of a CBD market that had previously been more prominent, with store closures related to management, licensing, or supply. Arica, by contrast, combined tolerance of street consumption with a market oriented toward supplies for indoor cultivation. Desert conditions make outdoor cultivation more difficult and favor technical solutions adapted to the environment. These contrasts show that geography participates in the material organization of the market and modifies local forms of supply. The Chilean scene therefore does not follow a single pattern: it combines social tolerance, commercial discretion, informal networks, and territory-specific solutions according to tourism, climate, urban density, and the availability of consumption spaces.

Peru: discretion, stigma, and legal ambiguity

In Peru, observed consumption was less visible and was accompanied by greater discretion in several of the settings visited. Recent literature on the country describes a regulatory and scientific context in transformation, especially around medical cannabis, while also identifying barriers to implementation, access, and knowledge. Wong-Salgado et al. argue that Peruvian regulation must be understood together with the institutional and scientific capacities that sustain its implementation. The ethnographic findings suggest that low visibility cannot be attributed to a single cause: it is related to stigma, local moralities, territorial characteristics, and perceived regulatory risk. These conditions help explain why the legal recognition of authorized uses does not automatically translate into greater public visibility of consumption (14,18,20).

In the highlands, altitude and the physical fatigue associated with everyday life appeared in conversations as factors orienting some practices toward substances perceived as more activating, particularly coca. Representations linking cannabis with poverty, deviance, or lower social status also persisted. Some interlocutors described moral hierarchies in which other substances could be perceived as less stigmatizing than marijuana. These narratives are not interpreted as universal properties of Peruvian society, but as situated elements of the observed field. Their analytical relevance lies in showing that consumption preferences and visibility are articulated with social classifications, geographical conditions, and moral expectations that exceed legal regulation.

Peruvian regulations authorize medical uses of cannabis, although their practical implementation presents ambiguities and compliance costs. The General Directorate of Medicines, Supplies and Drugs of Peru's Ministry of Health establishes requirements for medicinal products and authorized actors within the health framework. During fieldwork, these rules coexisted with accounts of inspections, seizures, and difficulties sustaining commercial activities related to derivatives. The distance between regulatory authorization and everyday experience emerged as a source of uncertainty for users and small businesses. The Peruvian case shows that the existence of a legal pathway does not by itself guarantee stable access, clear information, or a sharp separation among formal, informal, and semi-clandestine circuits.

Accounts from merchants and users described raids, seizures, and practical difficulties distinguishing medicinal derivatives from other forms of cannabis. This uncertainty affected establishments offering oils or supplies and reinforced a perception of legal insecurity. In Lima, recreational access was articulated through closed networks and messaging applications: some businesses sold legal products while simultaneously functioning as indirect connection points to flower suppliers. Entry into these circuits depended on personal referrals and prior trust. The informality observed did not operate as an absence of order, but as a system of access socially regulated through reputation, discretion, and knowledge of intermediaries.

Ecuador: formal and informal markets and borderlands

In Ecuador, especially Quito, a visible coexistence of formal, gray, and informal circuits was observed. International evidence on regulated markets shows that this overlap is not exceptional: gray markets can emerge when legally produced products circulate through channels not contemplated by regulation, while consumers compare price, availability, trust, and quality across suppliers. Findings from Uruguay and Canada show that legalization and formalization do not immediately eliminate informal circuits, but can reconfigure them. In Quito, this coexistence produced differentiated access options according to purchasing power, product stability, trust, and preferences for security or anonymity, a pattern compatible with contemporary literature on transitions between legal and illicit markets (8,11).

Ecuadorian regulation has opened space for low-THC derivative products, but fieldwork showed variation in the potency and commercialization of the cannabinoids offered. Some stores focused on medicinal products and CBD-dominant derivatives, while others reserved higher-potency products for known customers. Literature on gray markets and transitions toward regulated channels shows that formal and informal circuits can coexist when differences persist in price, availability, trust, and access requirements. In Quito, this duality produced markets differentiated by security, product stability, supplier reputation, and purchasing power (10,11).

In Ecuadorian border cities, the configuration changed visibly. The presence of legal cannabis-related businesses declined, and commercial circuits appeared more conditioned by the movement of goods, weak institutional presence, and illegal economies crossing the territory. These spaces functioned mainly as zones of transit and connection rather than as settings for the consolidation of formalized cannabis markets. Comparison with Quito shows that national regulation has different effects

depending on commercial infrastructure, intensity of control, and each city's territorial position. Border areas introduce specific risks and opportunities that modify access, visibility, and the possibility of sustaining establishments oriented toward medicinal or recreational products.

Colombia: extreme visibility and contestation over the field

Among the cities visited, Colombia showed the greatest visibility of consumption in public spaces and a high density of actors contesting legitimacy, regulation, and economic opportunities. Recent studies show that citizens' positions on cannabis control are heterogeneous and that implementation of medical reforms has generated specific institutional configurations. Rivera-Vélez and Marín-Llanes propose criteria for regulating the adult-use market while simultaneously addressing public health, security, and institutional design, whereas Bedoya Sandoval et al. show that differences in knowledge and attitudes exist even among health-professions students. The observed Colombian scene thus combines public exposure, organizations, commerce, activism, and disputes over who can legitimately participate in a transforming market (13,16,17).

The same scene included growers, activists, merchants, foundations, and licensed projects that have built repertoires of legitimacy around cannabis over many years. Initiatives aimed at patients, small producers, and actors attempting to operate within regulatory limits related to home cultivation or authorized production were observed. This organizational density distinguishes Colombia from the other cases on the route because the dispute is not limited to individual consumption but extends to the definition of the market, recognition of actors, and distribution of economic opportunities. The presence of organizations and public figures turns regulation into an open field of negotiation in which medical, recreational, and business interests compete for legitimacy and institutional access.

Colombia emerged as the setting with the greatest visibility and the most intense dispute over the future of the cannabis field. A possible expansion of adult use does not imply automatic democratization of the market, because formalization may concentrate opportunities among actors with greater financial, legal, and organizational capacity. Recent literature on Colombian regulation emphasizes that market design must balance public health, security, economic participation, and inclusion mechanisms. Findings on citizen and professional attitudes also show that social legitimacy remains heterogeneous. The Colombian controversy therefore extends beyond legalization or prohibition to include who obtains licenses, who captures value, and which actors are displaced (13,16,17,31).

Figure 2.

Urban cannabis scenes on the South American Pacific coast: consumption visibility and market formality by city.

Note: Where data overlapped in the chart, one of the circles was shifted slightly to make the country color visible. Source: Author's elaboration.

Figure 2 summarizes relative differences among the observed settings and shows that greater street visibility of cannabis tends to coexist with broader levels of social tolerance, although this relationship

does not eliminate state intervention. Colombia occupies the position of greatest public exposure along the route, while several Peruvian contexts appear at the lower-visibility extreme. The comparison suggests that the presence of consumption in open spaces depends both on social acceptance and on expectations regarding surveillance, sanction, and reputation. The visibility axis should therefore not be interpreted as a measure of prevalence, but as a qualitative synthesis of how practices become observable in each urban scene.

The same graph allows comparison of the relative intensity of state control. Colombia and Peru appear as settings with stronger institutional intervention, but under different configurations. In Colombia, recreational consumption showed greater public exposure and coexisted with activism, commerce, and visible regulatory disputes. In Peru, intervention was articulated with greater discretion, stigma, and ambiguity surrounding medicinal products and informal circuits. These differences show that a similar level of control does not necessarily produce the same social pattern. Coercion can coexist with high visibility or concealment depending on the local legitimacy of consumption, organizational density, regulatory clarity, and the concrete actions of authorities and merchants.

Market formality introduces a third relevant dimension. Ecuador, especially Quito, showed the greatest relative presence of establishments and circuits operating with an appearance of formalization, although these coexisted with gray and informal markets. Chile showed a different combination: high street tolerance in several cities but little formal sale of flower in establishments. Figure 2 helps visualize that visible consumption and formal markets do not necessarily advance in the same direction. A territory can socially normalize use while maintaining informal trade, while another can develop regulated products and stores without expanding recreational visibility. This separation among consumption, commerce, and control constitutes one of the central comparative findings of the route.

Figure 3.

Typology of cannabis economies on the South American Pacific coast: consumption visibility and degree of market formalization.

Tipología de economías cannábicas en la costa pacífica sudamericana: visibilidad del consumo y grado de formalización del mercado.

Note: The cities mentioned were visited between February and May 2026. Source: Author's elaboration.

Figure 3 organizes the observed cannabis economies through a matrix combining consumption visibility and degree of market formalization. The low-visibility/high-informality quadrant mainly includes scenes from the Peruvian highlands and Tacna, where consumption remained discreet and access depended on closed networks. The position of these cases simultaneously reflects stigma, limited public exposure, and exchange mechanisms based on personal referrals. The matrix is not intended to establish rigid boundaries among market types, but to provide a comparative tool for

recognizing dominant configurations. Its usefulness lies in showing that two cities may share informality and nevertheless differ substantially in the public visibility of their practices.

The high-visibility/high-informality quadrant includes several Chilean cities, among them Valparaíso, Valdivia, Arica, Santiago, Pucón, Frutillar, and Viña del Mar, although each presented its own nuances. In these contexts, consumption could be relatively observable while access to flower continued to depend on contacts, intermediaries, or digital platforms. The low-visibility/greater-formalization quadrant included spaces linked to medical uses in Peru and Ecuadorian areas oriented toward CBD. These cases show that the existence of legal or commercial mechanisms does not necessarily imply visible recreational consumption. Formalization can be concentrated in specific products and coexist with social norms that keep the practice outside public space.

The high-visibility/greater-formalization quadrant brings together Colombian scenes and Quito as cases where public exposure coexisted with licenses, organizations, businesses, or more developed regulatory processes. The location of each city was obtained by cross-referencing relative positions derived from MAXQDA coding and triangulation with field notes and conversations. The coordinates should therefore be read as qualitative-comparative ordinal categories rather than standardized statistical measurements. The matrix condenses an important conclusion: market formalization and social normalization are related but not equivalent processes. Each city articulates both axes through specific combinations of regulation, reputation, access, commercial infrastructure, and state control.

El cuadrante de alta visibilidad y alta informalidad concentra varias ciudades chilenas, entre ellas Valparaíso, Valdivia, Arica, Santiago, Pucón, Frutillar y Viña del Mar, aunque cada una presentó matices propios. En estos contextos, el consumo pudo resultar relativamente observable mientras el acceso a flores continuó dependiendo de contactos, intermediarios o plataformas digitales. En el cuadrante de baja visibilidad y mayor formalización se situaron espacios vinculados con usos medicinales en Perú y zonas ecuatorianas orientadas a CBD. Estos casos muestran que la existencia de dispositivos legales o comerciales no implica necesariamente un consumo recreativo visible. La formalización puede concentrarse en productos específicos y coexistir con normas sociales que mantienen la práctica fuera del espacio público.

DISCUSSION

The ethnographic route shows that speaking of a single cannabis policy or market obscures decisive differences among territories. Chile combined social tolerance with discretionary control; Peru articulated discretion and regulatory ambiguity; Ecuador superimposed formal and informal circuits; and Colombia brought together high visibility and institutional contestation. This interpretation is consistent with literature documenting gray markets, implementation gaps, and the persistence of unregulated channels even after legal reforms. The comparison also confirms that organization, access, price, and state capacities shape the concrete form adopted by each market, meaning legalization should be evaluated as an institutional process rather than as an isolated legal change (1,3,7,11).

El recorrido etnográfico muestra que hablar de una única política o de un único mercado de cannabis oculta diferencias decisivas entre territorios. Chile combinó tolerancia social con control discrecional; Perú articuló discreción y ambigüedad regulatoria; Ecuador superpuso circuitos formales e informales; y Colombia reunió alta visibilidad y disputa institucional. Esta interpretación coincide con la literatura que documenta mercados grises, brechas de implementación y persistencia de canales no regulados incluso después de reformas legales. La comparación también confirma que organización, acceso, precio y capacidades estatales intervienen en la forma concreta que adopta cada mercado, por lo que la legalización debe evaluarse como proceso institucional y no como un cambio jurídico aislado (1,3,7,11).

The ethnographic route shows that speaking abstractly of “the” cannabis policy or “the” cannabis market obscures decisive differences among territories. Chile combined social tolerance with discretionary control; Peru articulated discretion, stigma, and closed markets; Ecuador superimposed formal and informal circuits; Colombia brought together high visibility and regulatory contestation. Sandberg argues that cannabis markets should be understood as culturally situated configurations, an idea consistent with the contrasts observed. Bogren and Castillo extend this interpretation by demanding attention to organizations and institutions, not only interpersonal networks. The findings suggest that local configuration emerges from the interaction of social relationships, rules, economic capacities, and concrete forms of state intervention (7,10,13).

The trust networks observed during fieldwork are related to recent findings on transitions between illicit and regulated markets. Donnan et al. show that quality, convenience, safety, and purchasing experience shape the decision to leave unregulated suppliers, while Maillet identifies profiles that continue to use different illicit sources. Hammond et al. estimated that five years after Canadian legalization, the legal market had captured a large proportion of expenditure, although a relevant illegal segment persisted. These results help explain why applications, personal contacts, and recommendations continue to operate in cities where visible establishments exist: regulation modifies circuits, but trust and product attributes continue to influence channel choice (9,10,35).

This mosaic also reflects internal tensions between centers and peripheries, tourist areas and working-class neighborhoods, medical scenes and recreational circuits. In Medellín, for example, fieldwork moved from an oil shop in a tourist area to spaces where consumption is concealed and chats where purchases are negotiated through contacts. Moeller and Sandberg show that trust and credit structure illegal drug-distribution networks, a dynamic consistent with what was observed. Variation is therefore not only legal: it depends on who knows whom, who facilitates access, who sets prices, and who has the capacity to monitor, seize, or permit (8,14,16).

The relational structure of the cannabis field distributes positions unequally. Formalization can increase safety and stability, but it can also create administrative, financial, and territorial barriers. Studies of regulatory equity show that licenses and participation mechanisms do not by themselves guarantee a fair distribution of opportunities. LoParco et al. documented substantial variation in social-equity initiatives across jurisdictions with legal markets, while Han and Durand-Morat show that pricing and taxation structures can encourage or discourage persistence of the illicit market.

Consequently, access to capital, licenses, information, and organizational networks must be incorporated into the analysis of who obtains benefits and who remains in precarious or informal circuits (31,32).

The relational structure of the cannabis field distributes positions unequally. Consumers, small merchants, growers, activists, professionals, and authorities do not participate with the same resources or face the same risks. Networks can protect against uncertainty, but they can also exclude those who lack referrals, capital, or connections. Formalized businesses gain advantages in visibility and stability, while informal actors depend on discretion and interpersonal trust. This inequality helps explain why regulatory changes do not automatically produce open or accessible markets. The finding reinforces an organizational interpretation of the phenomenon: legality, reputation, territorial position, and economic capacity combine to determine who can act publicly and who remains in hidden circuits.

Regulatory changes also do not automatically eliminate inequalities produced by decades of punitive control. Wu et al. found that recreational legalization had a limited effect on racial disparities in incarceration in the cases analyzed, demonstrating that market reform does not necessarily correct the accumulated effects of criminalization by itself. In Latin America, reforms are embedded in specific institutions and political cultures; Rivera-Vélez shows for Mexico that implementation can take the form of administrative resistance that alters the reach of policy. These contrasts are consistent with evidence from the present study: visibility, tolerance, and formalization depend on how public and private actors interpret and implement specific rules (33,34).

Across the four countries, cannabis served as an entry point for observing the relationship among the state, market, and public morality. Networks that provide access to flower, extracts, or oils simultaneously distribute trust, risks, opportunities, and exposure to control. Recent research on gray markets, political preferences, and implementation shows that reforms reconfigure these tensions without eliminating them: they change access channels, visibility, and economic opportunities, while inequalities and unregulated circuits persist. The ethnographic material is consistent with this complexity and suggests that regulatory changes alter who can trade or claim legitimacy without immediately erasing hierarchies, stigmas, or informal markets (8,12,13,35).

Study limitations

The study has four main limitations. First, fieldwork was concentrated between February and May 2026, so the findings correspond to the observed period and do not represent a longitudinal trajectory. Second, cities were selected within an ethnographic itinerary rather than through probabilistic sampling; therefore, the configurations described cannot be statistically generalized to each country. Third, immersion expanded access to trust networks but also required permanent reflexivity regarding the researcher's position. Fourth, access to categories of actors was unequal: consumers and informal sellers were more accessible than some authorities and institutions. These conditions delimit the comparative scope without nullifying the analytical value of the territorial contrasts observed (3,5,21).

Thinking about cannabis public policy from this perspective requires abandoning universal recipes and recognizing that any regulation operates within concrete histories, geographies, and inequalities. Recent evidence shows that merely authorizing a market does not guarantee a complete transition away from illicit circuits, nor does it ensure economic equity or automatic stigma reduction. Regulatory models should combine public-health criteria, access, information, rights protection, market monitoring, and inclusion mechanisms for actors historically affected by prohibition. Comparative experience also suggests that policy should be continuously evaluated because prices, availability, new commercial forms, and consumer practices can modify the effects initially anticipated (5,23,31,34).

Many reforms do not close the cannabis issue, but instead shift part of the activity toward gray zones where actors continually interpret what is permitted, tolerated, or prosecuted. This ambiguity forces users and merchants to modulate visibility, select spaces, and manage trust relationships. Studies on gray markets and regulatory implementation show that these intermediate zones can emerge when institutional design does not fully absorb pre-existing practices or when legal channels are not equally accessible to everyone. The ethnographic evidence supports this interpretation: situated regulation should reduce uncertainty, clarify rights and obligations, and provide access pathways compatible with public-health and equity objectives (1,3,8,31).

Regulation also requires reconsidering the public language used to represent cannabis and those who use it. Recent literature warns that generalizing terms and moralizing frameworks can reinforce stigma and hinder differentiated assessment of uses, risks, and contexts. Communication interventions against stigma show heterogeneous results but converge on the importance of involving affected people and avoiding narratives that reduce every experience of consumption to deviance or illness. Ethnographic findings from the South American Pacific coast reinforce this need: each scene combines different risks, tolerances, and controls. A situated policy must distinguish medical, recreational, and problematic use while also recognizing territorial inequalities and local conditions of access (18-23).

Regulation also requires reconsidering the public language used to represent cannabis. Reducing it exclusively to a threat, deviance, or a “gateway” prevents distinctions among uses, risks, contexts, and actors and can reinforce responses that produce more clandestinity than protection. Ethnographic evidence shows settings where risk comes not only from consumption but also from regulatory uncertainty, unsafe markets, and selective enforcement of rules. An informed public discussion should differentiate medical, recreational, and problematic uses and incorporate evidence on harm reduction and territorial inequalities. In this sense, the South American Pacific coast offers a valuable comparative field for designing responses that are more sensitive to existing practices and less dependent on homogeneous prohibitionist categories (22,28,32).

CONCLUSIONS

In line with the general objective, the ethnographic comparison shows that cannabis consumption practices, markets, and sociopolitical disputes are territorially configured and do not follow a single regional logic. Chile combined relatively high visibility with social tolerance and discretionary control;

Peru showed greater concealment, stigma, and access through closed networks; Ecuador displayed a particularly visible overlap between formal and informal circuits; and Colombia articulated high visibility with intense disputes over regulation, markets, and legitimacy. The main analytical contribution therefore consists in identifying differentiated socioterritorial configurations rather than assuming a homogeneous South American model.

The findings show that the boundary between legality and illegality operates as a practical continuum mediated by networks, organizations, and unequal capacities for formalization. The observed circuits are sustained by personal contacts, reputation, messaging applications, specialized businesses, associations, and suppliers that connect formal spaces with informal exchanges. This structure confirms the usefulness of analyzing the market simultaneously through trust relationships and institutional conditions. The existence of medical regulation, licenses, or specialized establishments does not eliminate informal markets; in certain contexts, it reorganizes them and produces new gray zones where implementation of the rules depends on administrative capacities and situated interpretations.

Third, the public visibility of cannabis depends on both formal rules and local moralities, urban geography, and control practices. Contrasts among tourist cities, border areas, capitals, and highland settings show that consumption can be socially tolerated, displaced into the private sphere, or subjected to surveillance even within the same country. Recent evidence on stigma and regulation supports the view that social perceptions, availability, and institutional control interact to produce different urban scenes; regulatory analysis should therefore incorporate practices, spaces, and social relationships.

Fourth, the public-policy implications derived from the study favor situated approaches to harm reduction, social justice, and regulation sensitive to inequalities in access. Contemporary evidence shows that implementation can produce unintended effects, gray markets, and barriers to participation even in regulated systems. It also demonstrates that social-equity initiatives require design, resources, and evaluation to prevent formalization from reproducing pre-existing advantages. Consequently, Chile, Peru, Ecuador, and Colombia should monitor transitions between markets and periodically evaluate the health, economic, and social effects of their reforms.

BIBLIOGRAPHIC REFERENCES

1. Queirolo R, Kilmer B, Repetto L, Pardal M, Sotto B, Alvarez E. Intended and unintended effects of cannabis regulation in Uruguay. *Policy Polit.* 2024;1-18.
<https://doi.org/10.1332/03055736Y2024D000000051>
2. Pardal M, Queirolo R, Repetto L, Rychert M. A decade of regulated Cannabis Social Clubs in Uruguay: five key developments and challenges ahead. *Int J Drug Policy.* 2026;151:105213.
<https://doi.org/10.1016/j.drugpo.2026.105213>.
3. Barry RA. Challenges achieving horizontal coherence across health and public security policies in formulating Uruguay's cannabis regulation. *Health Promot Int.* 2024;39(5):daae136.
<https://doi.org/10.1093/heapro/daae136>.

4. Durán-Martínez A, Pennell C. Change from above or pressure from below? The diffusion of cannabis reform in Latin America. *Bull Lat Am Res.* 2024;43:347-361. <https://doi.org/10.1111/blar.13580>.
5. Manthey J, Jacobsen B, Hayer T, Kalke J, López-Pelayo H, Pons-Cabrera MT, et al. The impact of legal cannabis availability on cannabis use and health outcomes: a systematic review. *Int J Drug Policy.* 2023;116:104039. <https://doi.org/10.1016/j.drugpo.2023.104039>.
6. Nazif-Munoz JI, Domínguez-Cancino K, Martínez P, Jauffret-Roustide M. Uneven effects of twenty years of Chile's cannabis policy implementation in cannabis onset. *Int J Drug Policy.* 2024;127:104395. <https://doi.org/10.1016/j.drugpo.2024.104395>.
7. Bogren A, Castillo D. Beyond networks and institutions: rethinking the role of organization in illicit drug market interaction. *Crime Media Cult.* 2024. <https://doi.org/10.1177/17488958241289361>
8. Repetto L, Queirolo R, Alonso J, Pardal M, Atuesta L, Kilmer B, et al. Conceptualizing cannabis grey markets: a typology based on the Uruguayan case. *Int J Drug Policy.* 2025;145:105020. <https://doi.org/10.1016/j.drugpo.2025.105020>.
9. Donnan JR, Howells R, Farooq S, Maillet M, Harris-Lane LM. Bridging the gap: exploring consumer experiences and motivations for transitioning between illicit and regulated cannabis markets. *Int J Drug Policy.* 2024;134:104644. <https://doi.org/10.1016/j.drugpo.2024.104644>.
10. Maillet MA. Individual differences in legal and illicit cannabis purchasing behaviour in British Columbia, Canada: findings from a 2021 cross-sectional survey. *Int J Drug Policy.* 2024;126:104363. <https://doi.org/10.1016/j.drugpo.2024.104363>.
11. Queirolo R, Rychert M, Pardal M. Market revenues and economic opportunities in the legal cannabis market in Uruguay. *J Illicit Econ Dev.* 2025;7(2):25-38. <https://doi.org/10.31389/jied.250>.
12. Durán-Martínez A, Fakhoury R. Who influences whom? Elite and citizen preferences regarding marijuana and drug legalisation in Latin America. *J Politics Lat Am.* 2025. <https://doi.org/10.1177/1866802X251369520>
13. Rivera-Vélez L, Díaz MC. Constructing policy paradigms through implementation: medical cannabis reforms in Colombia and Argentina. *Lat Am Policy.* 2025;16(4):e70031. <https://doi.org/10.1111/lamp.70031>.
14. Wong-Salgado P, Moya-Salazar J, Contreras-Pulache H, Pardo-Villarroel C. The regulatory and scientific context in the study of the medicinal use of cannabis in Peru. *Front Med.* 2025;12:1598227. <https://doi.org/10.3389/fmed.2025.1598227>.
15. Castillo-Carniglia A. National profile on substance use, substance use-related problems and policy: the case of Chile. *Addiction.* 2025;120(7):1466-1474. <https://doi.org/10.1111/add.70031>.
16. del Rio Forero D, Marín CP, Sastre MTM, et al. Mapping Colombians' positions on national policies to control tobacco and marijuana consumption: a pilot study. *Subst Abuse Treat Prev Policy.* 2025;20:16. <https://doi.org/10.1186/s13011-025-00646-w>.
17. Bedoya Sandoval JF, Arroyo Valencia LD, Molano Agudelo PA. Knowledge and attitudes toward medical cannabis among medicine, nursing, and physiotherapy students at a Colombian university: a cross-sectional study with multivariate analysis. *J Cannabis Res.* 2026;8:61. <https://doi.org/10.1186/s42238-026-00423-x>.

18. Müller F, Rasmussen N. Cultural stigmatization and police corruption: cannabis, gender, and legalization in Mexico. *Contemp Justice Rev.* 2022.
<https://doi.org/10.1080/09687637.2021.2004089>
19. Ferreyra FG, Mosqueira M. Drugs and religion in Latin America: a narrative literature review. *Contemp Drug Probl.* 2025. <https://doi.org/10.1177/00914509251314203>
20. Bathish R, Madden A, Duff C, Ritter A. Guiding principles for breaking down drug-related stigma in academic writing. *Int J Drug Policy.* 2024;131:104515.
<https://doi.org/10.1016/j.drugpo.2024.104515>.
21. Holland A, Freeman TP, Nicholls J, Burke C, Howkins J, Harris M, et al. Making sense of drug use and dependence: a scoping review of mass media interventions intended to reduce stigma towards people who use drugs. *Int J Drug Policy.* 2024;132:104543.
<https://doi.org/10.1016/j.drugpo.2024.104543>.
22. Santos JM, Teixeira ZM, Soliz M, Guerra MM. Cannabis use, risk level, and polysubstance use in a sample of Portuguese adults. *Rev Enferm Ref.* 2022;6(1):e21152.
<https://doi.org/10.12707/RV21152>.
23. Buschner M, Heckel N, Dürler P, Engeli EJ, Schneider S, Havelka EM, et al. The Züri Can study: can regulated cannabis sales promote lower-risk cannabis use? Mini-review and study protocol. *Int J Drug Policy.* 2024;133:104610. <https://doi.org/10.1016/j.drugpo.2024.104610>.
24. DeJonckheere M, Vaughn LM, James TG, Schondelmeyer AC. Qualitative thematic analysis in a mixed methods study: guidelines and considerations for integration. *J Mix Methods Res.* 2024;18(3):258-269. <https://doi.org/10.1177/15586898241257546>.
25. Naeem M, Ozuem W, Howell K, Ranfagni S. A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *Int J Qual Methods.* 2023;22.
<https://doi.org/10.1177/16094069231205789>
26. Byrne D. A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Qual Quant.* 2022;56:1391-1412. <https://doi.org/10.1007/s11135-021-01182-y>.
27. Olmos-Vega FM, Stalmeijer RE, Varpio L, Kahlke R. A practical guide to reflexivity in qualitative research: AMEE Guide No. 149. *Med Teach.* 2023;45(3):241-251.
<https://doi.org/10.1080/0142159X.2022.2057287>.
28. Vanke A. Multi-sited ethnography: developing avant-garde methodology for creative research into everyday lives. *Sociol Res Online.* 2025. <https://doi.org/10.1177/13607804251345915>
29. Prasad A, Shadnam M. Balancing breadth and depth in qualitative research: conceptualizing performativity through multi-sited ethnography. *Organ Stud.* 2023;44(5).
<https://doi.org/10.1177/01708406221145655>
30. Warren A, Gibson C. Follow the labour process: constructing explanations and making a difference through multi-sited ethnographic methods. *Environ Plan A Econ Space.* 2026;58(2).
<https://doi.org/10.1177/0308518X251326393>
31. LoParco CR, Speer M, Chakraborty R, Yang YT, Berg CJ. Cannabis social equity initiatives among U.S. states with legal nonmedical cannabis retail: a review and recommendations. *Am J Prev Med.* 2026;70(6):108218. <https://doi.org/10.1016/j.amepre.2025.108218>.
32. Han J, Durand-Morat A. Does sin tax on the legal market facilitate the illicit market? An ex-ante assessment on the US cannabis market. *J Agric Appl Econ Assoc.* 2024;3(2):330-345.
<https://doi.org/10.1002/jaa2.114>.

33. Wu G, Durante KA, Melton HC, Roddy AL. Marijuana legalization and racial disparities in prison incarceration in Colorado and Washington State: a quasi-experimental study. *J Exp Criminol*. 2025;21:325-348. <https://doi.org/10.1007/s11292-023-09590-w>.
34. Rivera-Vélez L. Dissenting implementation of cannabis policies in Mexico: a strategy of outlaw resistance. *Bull Lat Am Res*. 2025;44(4):310-323. <https://doi.org/10.1111/blar.70000>.
35. Hammond D, Hong D, Rundle S, Iraniparast M, Kilmer B, Wadsworth E. Transitions to legal cannabis markets: legal market capture of cannabis expenditures in Canada following federal cannabis legalization. *Int J Drug Policy*. 2025;142:104828. <https://doi.org/10.1016/j.drugpo.2025.104828>.

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