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Review

Community Health Workers and Mental Health Among Indigenous Communities in Amazonia: A Scoping Review

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Abstract

Indigenous peoples in Amazonia face major mental health inequities, including high rates of suicidal behaviour among adolescents and young adults in some settings. We conducted a scoping review of the peer-reviewed literature on community health workers (CHWs) and equivalent cadres involved in Indigenous and remote contexts, with a focus on their roles in relation to mental health, psychosocial support, and suicide prevention among Indigenous populations in Amazonia and the Guiana Shield. We reported this review in line with PRISMA-ScR. Searches (September–November 2025) were conducted in PubMed/MEDLINE, Scopus, Web of Science and SciELO, complemented by targeted searches in major publisher platforms and JSTOR. We included English, French, Spanish and Portuguese publications that (i) described CHWs or functionally equivalent cadres in Indigenous/remote contexts and/or (ii) reported CHW-related roles, models, or experiences relevant to mental health, psychosocial support or suicide prevention in Amazonian settings. Global documentation of CHW designations used in Indigenous/remote contexts was compiled; we compiled evidence from Amazonia and the Guiana Shield on CHW roles, programme models, implementation conditions and reported outcomes. Data were charted into a structured template (cadre designation, setting, population, study type, functions, programme features and reported mental health/suicide-related outcomes) and synthesised descriptively and thematically. CHWs commonly function as cultural and linguistic brokers between Indigenous communities and biomedical systems, supporting early detection of distress, psychosocial accompaniment, referral navigation and dialogue with local healing practices. Reported programme models differ markedly: Brazil's institutionalised Indigenous Health Agents (AIS) offer stability and formal recognition, whereas French Guiana relies more heavily on project-based mediation with innovative practices but greater funding fragility. The available literature remains heterogeneous and uneven across countries, with limited evaluative designs and substantial reliance on descriptive reports. Future work should prioritise stronger implementation and impact evaluation, alongside Indigenous-led governance and sustainable support for CHW cadres.

Keywords: community health workers; CHWs; Indigenous health; mental health; suicide prevention; Amazonia; French Guiana; Brazil; intercultural health

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1. Introduction

1.1. Framing the Review: Suicide, Suffering, and Culture

Suicide is a culturally mediated phenomenon whose meanings, expressions, and responses vary across social and moral worlds. Following Durkheim's [1] insight that self-destructive acts cannot be understood outside the social frameworks that give them meaning, and drawing on work in anthropology and transcultural psychiatry including Marsella [2] and Kirmayer et al. [3], this scoping review starts from the premise that interpretations of distress may shape how mental suffering is recognised, communicated, and addressed in Indigenous settings. This perspective is particularly relevant in Amazonia, where community health workers (CHWs) and equivalent cadres often work at the interface between Indigenous and biomedical systems of care.

1.2. Conceptual Background: Suffering, Relationality, and Mediation

In Western spiritual and philosophical traditions, psychological suffering has historically been interpreted within a moral and individual framework. Rooted in Judeo-Christian and later humanist thought, distress often signifies a disruption of the self's integrity—a conflict between inner will, moral obligation, and divine or social order [4,5]. Healing in this context is conceived not merely as confession or moral repair but as insight and the self's proper orientation within the moral cosmos.

Taylor's Sources of the Self (1992) [4] is useful here insofar as it highlights the moral sources through which suffering, personhood, and healing become intelligible in different social worlds. In Amazonian Indigenous settings, this perspective helps frame suffering not only as an individual experience but also as a rupture in broader relational and moral orders.

This relational world view echoes what anthropologists and cognitive theorists have described as archaic perceptual frameworks—non-analytical, relational modes of experience that integrate perception, cosmology, and self-world continuity [6–8]—still active in animist cosmologies such as those of Amazonian societies, where suffering is understood as a rupture in the web of relations linking humans, non-humans, and spiritual entities. Kirmayer's discussion of the cultural concept of the person [9] is also relevant here. From an evolutionary or comparative standpoint, these perspectives suggest a long-standing difference in how human societies have encoded suffering: Western traditions tend to internalise and moralise it, whereas relational worldviews—Asian or Amazonian—interpret it as an imbalance within the field of relationships. This contrast has direct implications for understanding suicidal experience, as it frames the meaning of pain either as an individual failure of being or as a signal of relational disconnection within a broader existential ecology [9].

These contrasting world views of suffering also carry important implications for suicide prevention and mental health care. In Western clinical and spiritual frameworks, suicide is often conceptualised as the culmination of an internal psychological crisis, in which unbearable suffering overwhelms the individual's sense of coherence, purpose, or moral worth. Joiner's interpersonal theory [10] is one influential formulation of this orientation, linking suicidal behaviour to disrupted belonging, perceived burdensomeness, and acquired capability. Prevention efforts therefore emphasise self-restoration—through psychotherapy, pharmacological treatment, or moral and existential reintegration.

Read in relational terms, Joiner's emphasis on belonging and disconnection [10] also resonates with Amazonian understandings of distress as a rupture within networks of reciprocity, recognition, and moral life. In this sense, the restoration of social belonging and meaningful participation can be read not only as clinical levers of prevention but also as processes of relational repair.

Building on this, relational worldviews understand distress and suicidal ideation less as pathologies of the self than as disruptions of relational vitality—a loss of embeddedness within a network of human, social, and cosmological relations [11]. Healing, in this context, entails the restoration of relational balance rather than the repair of an isolated psyche. Collective rituals, communal mourning, and renewed connection with natural or spiritual environments become central modes of care, reaffirming that the process of healing is both social and ecological.

Within contemporary health systems, community health workers (CHWs) —locally recruited frontline actors who provide basic care, health education, and social mediation within their own communities—play a crucial role in sustaining this relational dimension. Because different countries use different designations for cadres whose functions overlap with those of CHWs, we use the terms CHW/mediator broadly in this review. By virtue of their cultural proximity, social embeddedness, and intermediary position between clinical institutions and local communities, CHWs act as agents of reconnection—re-establishing trust, belonging, and participation within the social fabric [12,13]. Their practice represents a modern expression of relational healing, translating the principles of community solidarity and shared meaning into practical forms of psychosocial support. Nisbett's contrast between analytic and holistic modes of thought [14] offers a useful comparative reference for the broader divergence outlined above.

A condensed synthesis of CHW designations by geographic area is presented in Table 1, while the full typology is provided in Supplementary Table S1.

Table 1. Summary of Community Health Worker (CHW) Designations in Indigenous Contexts by Geographic Area.

Geographic Area	Number of Distinct CHW Designations Identified *	Illustrative Examples (Non-Exhaustive)
Africa	~15	Agents de santé communautaire, Health Extension Workers, Village Health Teams
Asia	~17	ASHAs, Behvarz, Lady Health Workers, Village Health Volunteers
Central & South America + Caribbean	~13	Agentes Indígenas de Saúde, Promotores de salud, Médiateurs en santé
Pacific	~6	Village Health Aides, Kaiāwhina, Aboriginal Health Workers
Arctic / Circumpolar	~3	Community Health Representatives, Community Health Aides
Russian Federation	1	Feldsher
Total	**≈55–60 designations**	—

** Distinct designations refer to unique lexical labels used in the literature, including language-specific and role-specific variants.*

Lehmann & Sanders (2007) [12] offer a foundational synthesis of global CHW experiences, showing that their effectiveness depends on careful selection, sustained training, and integration within both community and institutional structures. While CHWs demonstrably enhance access, coverage, and trust in peripheral settings, programmes often fail when treated as low-cost substitutes for structural investment. Crucially, the authors highlight that community ownership and political commitment are non-negotiable for sustainability, as exemplified by Brazil's *Agentes Comunitários de Saúde*, embedded in health systems. Framing intercultural CHWs within this global evidence base reinforces their legitimacy as essential human resources for health and as culturally grounded agents of psychosocial resilience in Amazonian border communities.

Taken together, these conceptual references support the interpretation of CHWs as mediators working across moral, social, and clinical worlds. In this review, however, they

serve only as interpretive background; the primary aim remains to map the peer-reviewed literature on CHWs, programme models, and mental health- and suicide-related functions in Amazonia and the Guiana Shield.

1.3. Conceptual Framing

This review is conceptually informed by three related ideas. First, a relational understanding of suffering, in which distress is approached not only as an individual psychological state but also as a disruption of social, moral, and cosmological relations. Second, moral worlds or moral sources, understood here as the background values and horizons of meaning through which suffering, healing, and personhood become intelligible in a given social setting. Third, mediation, referring to the work of actors who connect different systems of knowledge and care; in this review, CHWs are approached as mediators between Indigenous worlds of care and biomedical institutions. These concepts inform the framing and interpretation of this scoping review, but they were not used as formal inclusion criteria and do not constitute a separate analytical stream from the evidence mapping.

Having outlined this interpretive background, we now turn to the Amazonian context that defines the regional focus of the review.

1.4. Amazonian Context and Rationale for Regional Focus

The Amazon basin and the Guiana Shield illustrate these relational world views in their most vital and vulnerable forms. Encompassing one of the planet's largest continuous tropical forest systems, these territories are home to a remarkable diversity of Indigenous peoples whose worldviews and healing practices remain deeply intertwined with the environment. For the purposes of this review, Amazonia and the Guiana Shield are approached as a cross-border macro-region including Brazil, French Guiana, Suriname, Guyana, Venezuela, Colombia, Ecuador, Peru, and Bolivia. This regional focus includes remote forest territories, riverine and border settings, and Indigenous communities whose access to care is shaped by distance, multilingualism, fragmented service provision, and intercultural interface challenges.

Yet they also concentrate some of the most profound health inequities in the Americas. The legacies of colonisation, evangelisation, and extractive development have disrupted Indigenous livelihoods, social cohesion, and cosmologies of health, leaving scars that continue to shape contemporary mental well-being. Land dispossession, forced displacement, and the erosion of traditional authority structures have contributed to high levels of psychological distress, particularly among youth, expressed through alarming rates of suicide and substance use.

Evidence, however, shows that suicide among Indigenous peoples is neither universal nor uniform: while some of the highest rates occur in circumpolar regions, parts of Latin America, and Australia, other Indigenous groups maintain parity with or even lower rates than national populations [15]. This demonstrates that Indigenous identity does not inherently predict suicide risk; rather, outcomes are shaped by context. However, the absence of ethnicity-disaggregated data and the failure to distinguish between urban, rural, and remote Indigenous populations continue to constrain evidence-based responses.

Amazonia and the Guiana Shield remain peripheral in global Indigenous mental health research. Most available evidence derives from North America, Australia, or the Arctic, while the Amazonian context—where linguistic diversity, spiritual worldviews, and political marginalisation intersect—poses unique challenges for intercultural health systems.

At the same time, this region is a site of resilience and innovation. In several countries, CHWs were crucial to link Indigenous and biomedical worlds. Their work demonstrates

how culturally grounded approaches can strengthen local capacity for prevention, support, and dialogue around mental suffering.

Amazonia and the Guiana Shield were selected as the primary regional focus of this review for three reasons. First, several Indigenous communities in this region experience marked mental health inequities and, in some settings, very high rates of suicidal behaviour. Second, the peer-reviewed literature remains limited and unevenly distributed across countries, making regional synthesis necessary. Third, the region presents distinctive forms of intercultural health work in which CHWs and equivalent cadres often serve as intermediaries between Indigenous communities and biomedical services.

1.5. Aim and Scope of the Review

This study is a scoping review with an evidence-mapping component. Its primary objective is to map and characterise the peer-reviewed literature on how CHWs and equivalent cadres are positioned within Indigenous and remote settings relevant to mental health, psychosocial support and suicide prevention in Amazonia and the Guiana Shield, with the principal focus on Indigenous populations rather than on CHWs' own mental health. Specifically, we asked: (1) What CHW/mediator cadres are described, what designations are used for them, and how are they embedded institutionally? (2) What roles and functions are reported in relation to mental suffering, crisis response, and suicide prevention? (3) What programme models and implementation conditions (training, supervision, remuneration, governance and intercultural arrangements) are documented? (4) What types of evidence and outcomes are reported, and where are the major gaps?

A secondary objective was to compile a global reference map of designations used for CHW-type cadres in Indigenous/remote contexts to clarify terminology and enable comparative interpretation. The focus on Amazonia and the Guiana Shield allows a regionally coherent synthesis of Indigenous mental health, suicide prevention, and intercultural CHW roles, while the global designation map provides a broader comparative terminology framework.

2. Methods

This study was designed as a scoping review with an evidence-mapping component. We reported the review in accordance with the PRISMA-ScR checklist. The protocol was not prospectively registered. A scoping approach was selected because the literature on CHWs, intercultural mediation, and Indigenous mental health in Amazonia is methodologically heterogeneous, spanning descriptive, qualitative, mixed-methods and policy-proximate programme reports, with substantial variation in programme models and terminology, rendering meta-analytic synthesis inappropriate. Accordingly, results are presented as a descriptive and thematic synthesis accompanied by an evidence map summarising cadres, study types, programme features, and reported mental health/suicide-related functions and outcomes.

2.1. Analytical Scope

Two complementary streams guided the review: (1) a global designation map documenting the range of labels used for CHW-type cadres in Indigenous and/or remote contexts across the seven UN socio-cultural regions; and (2) an Amazonia/Guiana Shield evidence map focusing on CHW roles, programme models, implementation conditions, and reported mental health/psychosocial/suicide-related content in Amazonian settings. These two streams were selected and analysed separately; the Amazonia/Guiana Shield evidence map was not produced by condensing the global designation map, but by applying additional regional and thematic criteria to identify a distinct subset of sources relevant

to Amazonian settings. The concepts of relational suffering, moral worlds, and mediation informed the framing of the review questions and the interpretation of findings, but were not applied as formal eligibility criteria. This two-stream design allowed us to retain a broad comparative terminology framework while concentrating the substantive evidence synthesis on a region with shared ecological, historical, and intercultural health-system characteristics. To ensure contextual coherence for synthesis and discussion, the evidence map was restricted to Amazonia and the Guiana Shield using three filters: (i) a geographical filter retaining studies conducted in Amazonian countries and territories (Brazil, French Guiana, Suriname, Guyana, Venezuela, Colombia, Ecuador, Peru, and Bolivia); (ii) a contextual filter selecting sources addressing Indigenous Amazonian populations, including those of the Guiana Plateau; and (iii) a thematic filter excluding settings where health and cultural conditions were not comparable for the purposes of this synthesis (e.g., Andean highlands or large urban settings).

2.2. Information Sources and Search Strategy

Searches were conducted between September and November 2025 in PubMed/MEDLINE, Scopus, Web of Science, and SciELO. Additional peer-reviewed records were identified through targeted searches within major publisher platforms (e.g., Elsevier, Wiley, Springer, Taylor & Francis, BMJ, MDPI, BioMed Central) and repositories such as JSTOR. Searches were limited to English, French, Spanish, and Portuguese; the last search was run in November 2025.

The search vocabulary was developed collectively by the authors in relation to the review objectives and was refined iteratively during preliminary scoping searches. Initial terms were derived from standard CHW terminology in the global health literature and were then expanded to capture linguistic variants, Indigenous- and intercultural health terminology, and region-specific expressions encountered during early screening and test searches.

Search strategies combined cadre terms, Indigenous/remote context terms, and geographic terms. Cadre terms included "community health worker", "CHW", "health volunteer", "health promoter", "promotor de salud", "agent de santé communautaire", "médiateur en santé communautaire", "intervenant communautaire", "village health worker", "health aide", and "health extension worker". Indigenous/remote context terms included "Indigenous", "tribal", "First Nations", "Inuit", "Aboriginal", "Amerindian", "ethnic minority", and related descriptors. Country names were used to support retrieval and to populate the Amazonia/Guiana Shield evidence map. Full search strings by database are provided in the Supplementary Material.

2.3. Eligibility Criteria (PCC Framework)

Eligibility was guided by a PCC (Population, Concept, Context) framework. The population of interest comprised Indigenous peoples and/or communities living in remote settings, including Amazonian Indigenous populations and those of the Guiana Shield. The concept of interest was CHWs and functionally equivalent cadres (including Indigenous-specific agents and intercultural mediators) and their reported roles in mental health, psychosocial support, crisis response, or suicide prevention. The context was Amazonia/Guiana Shield for the evidence map and all UN socio-cultural regions for the designation map. We included peer-reviewed sources of evidence (quantitative, qualitative and mixed-methods studies; programme descriptions containing empirical or historical material; and case studies). The restriction to peer-reviewed literature was adopted in order to maintain bibliographic verifiability and a more standardised evidence base across a highly heterogeneous multinational field. We recognise, however, that this

choice excludes potentially important grey literature, including NGO reports, community documents, policy briefs, and unpublished evaluations, which may be especially relevant in Indigenous and intercultural health contexts. Commentary pieces lacking empirical or historical material were excluded. Review articles were used for citation chasing but were not charted as primary evidence sources. Languages were limited to English, French, Spanish, and Portuguese.

2.4. Selection of Sources of Evidence

Records retrieved from searches were exported to a reference file, and duplicates were removed prior to screening. Screening was conducted in two stages: (1) title/abstract screening and (2) full-text assessment for eligibility. Reasons for exclusion at full-text stage were recorded. The main reasons for exclusion at full-text stage included absence of a clearly described CHW-type cadre or functional equivalent, lack of relevance to mental health, psychosocial support, crisis response, or suicide prevention, settings falling outside Amazonia/Guiana Shield for the evidence map, non-peer-reviewed sources, and articles that mentioned community-based actors only in passing without providing sufficient empirical or historical material for charting. In addition to database searching, reference lists of included sources and relevant review articles were screened to identify additional eligible sources (citation chasing). The PRISMA-ScR flow diagram summarises the selection process for the first axis: the global designation map.

2.5. Specific Inclusion Criteria for the Designation Map

For the global designation map, sources were required to (i) be peer-reviewed; (ii) explicitly provide a local designation for a CHW-type cadre or a clearly described functional equivalent; (iii) refer to Indigenous, tribal, ethnic minority, and/or remote community contexts; and (iv) be published in English, French, Spanish, or Portuguese. Grey literature (e.g., NGO reports, unpublished theses, policy briefs, and non-peer-reviewed government documents) was excluded. This delimitation was adopted to preserve consistency of source type across settings and countries, but it also means that the review does not capture the full range of practice-based or community-produced documentation relevant to this field.

2.6. Data Charting and Evidence-Map Construction

For each included source of evidence, data were charted into a structured template developed for this review. For edited volumes, the unit of inclusion was the source of evidence actually used in the review: when individual chapters were cited and analysed separately, each chapter was treated as a distinct source; when an edited volume was cited only as general background, it was not counted as multiple sources unless specific chapters were individually included and charted. Charting was conducted in two complementary streams: (1) a global designation map of CHW-type cadres in Indigenous/remote contexts; and (2) an Amazonia/Guiana Shield evidence map focusing on mental health, psychosocial support, and suicide-related roles, models, and implementation conditions. The charting form was drafted based on the review objectives and refined after piloting on a small subset of included sources to ensure it captured both designation-related fields and Amazonia-specific programme features. During charting, terminology and cadre labels were harmonised across languages using standardised entries, with explanatory notes retained when labels were not directly commensurable across settings. Charting entries were checked for internal consistency (e.g., designation, institutional embedding, and study type) prior to synthesis.

Stream 1: Designation map (global)

For sources contributing to the designation map, the following variables were charted:

- UN socio-cultural region;
- Country or territory;
- Indigenous or community context described;
- Local designation(s) of CHW-type cadres;
- Notes on scope, functions, or variants of the term;
- Full bibliographic reference (APA 7th edition);
- DOI and/or stable publisher URL.

Stream 2: Evidence map (Amazonia and the Guiana Shield)

For sources contributing to the Amazonia/Guiana Shield evidence map, the following variables were charted:

- Country/territory and sub-region (e.g., state/department/municipality when available);
- Indigenous group(s) and community setting (remote village, peri-urban, riverine, border area, etc.);
- Cadre designation(s) and institutional embedding (state programme/NGO/community-based);
- Study type/design (qualitative, quantitative, mixed-methods, programme description, case study);
- Aims and mental health/psychosocial/suicide-related focus (topic, functions, outcomes reported);
- CHW functions relevant to mental health and suicide prevention (e.g., brokerage, accompaniment, screening, referral navigation, crisis response, health education);
- Programme features (training content, supervision, remuneration/volunteer status, workload, language/intercultural arrangements);
- Implementation facilitators/barriers and contextual conditions;
- Any reported outcomes (service uptake, distress/symptom measures, referrals, crisis management, suicide-related indicators when described) and the nature of the evidence supporting them.

Where multiple cadres co-existed within a single country (e.g., *Agentes Indígenas de Saúde* and *Agentes Comunitários de Saúde* in Brazil), both were retained with explanatory notes. In countries without an Indigenous-specific cadre but with functional analogues documented in peer-reviewed studies (e.g., feldshers in the Russian Arctic, village doctors in rural China), these were included.

2.7. Synthesis and Presentation of the Evidence Map

Findings were synthesised descriptively and thematically. The designation map was summarised by region/country and label variants, with notes on scope and function. The Amazonia/Guiana Shield evidence map was summarised by country/territory, cadre type, study design, programme model features, and reported mental health/psychosocial/suicide-related functions and outcomes. Given the heterogeneity of designs and outcomes, no quantitative pooling was attempted; emphasis was placed on characterising the landscape of evidence and identifying gaps relevant to future evaluation and Indigenous-led programme development.

Consistent with scoping review guidance, we did not conduct a formal critical appraisal/risk-of-bias assessment, as the objective was to map the nature, range, and characteristics of the available evidence rather than estimate intervention effects.

2.8. Quality Control

All references were verified across multiple databases to confirm peer-reviewed status and bibliographic accuracy. For the designation map (Stream 1), we retained at least one authoritative peer-reviewed source per designation per country/territory; when distinct

cadres with different roles co-existed, these were recorded separately with explanatory notes. For the Amazonia/Guiana Shield evidence map (Stream 2), all eligible sources were retained and charted; consistency checks were conducted during charting to harmonise designation labels, institutional embedding and study-type categorisation across languages and settings.

2.9. Output

Charted data were compiled into: (1) a global designation map organised by UN socio-cultural region (Stream 1), listing country/territory, local designation(s), contextual notes, and a complete APA 7th reference with DOI and/or stable publisher URL; and (2) an Amazonia/Guiana Shield evidence map (Stream 2), summarising by country/territory and cadre type the study design, programme model features, implementation conditions, and mental health/psychosocial/suicide-related functions and outcomes reported in the literature.

A structured search of peer-reviewed literature identified 1243 records across major databases. After screening, 132 sources were retained for the designation map (Stream 1) because they explicitly documented local designations of CHW-type cadres or clearly described functional equivalents in Indigenous or remote contexts across the seven UN socio-cultural regions. These 132 sources refer to Stream 1 only. They were not subsequently condensed into the Amazonia/Guiana Shield evidence map (Stream 2), which was constructed separately using the additional regional and thematic filters described above.

Owing to space constraints, only a condensed version of the global dataset is presented in Supplementary Table S1, providing the region, country/territory, local designation, and a brief academic reference; cases in which the same designation is shared across multiple countries are grouped together. The complete extended dataset—including full APA-style references and Digital Object Identifiers (DOIs)—is available upon request.

Note: the PRISMA-ScR flow diagram (Figure 1) presents the selection process for Stream 1 (global designation map).

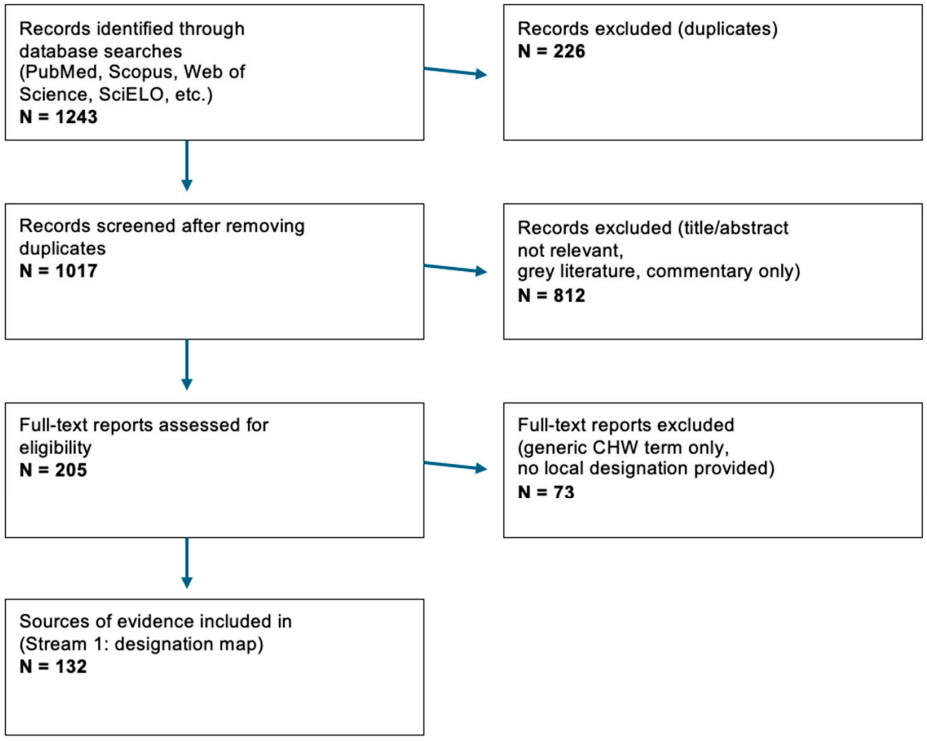

Figure 1. PRISMA-ScR flow diagram for Stream 1 (global designation map): literature search and selection process.

3. Results and Discussion

3.1. Characteristics of Sources Included for the Amazonia/Guiana Shield Evidence Map

Eight peer-reviewed sources were retained for the Amazonia/Guiana Shield evidence map. They cover four countries/territories: French Guiana, Brazil, Peru (Peruvian Amazon), and Suriname (interior region). The distribution is uneven, with several sources focused on French Guiana and Brazil, and fewer peer-reviewed contributions from Peru and Suriname.

Study designs and reporting formats are heterogeneous, spanning observational epidemiology of suicides and suicide attempts, implementation-oriented descriptions of health mediation in remote settings, an experience report on culturally attuned care following suicide attempt, community-based participatory research on expanded CHW roles during COVID-19, intervention mapping, and qualitative research on Indigenous perspectives on health care.

Overall, the mapped literature emphasises suicide epidemiology, mediation/interface models, and crisis- or determinants-oriented community health work, while evaluative evidence on mental health or suicide outcomes remains limited and inconsistently reported. Accordingly, the findings reported below should be read as descriptive and exploratory rather than as evidence of intervention effectiveness. Given the small number of peer-reviewed sources retained for the Amazonia/Guiana Shield evidence map and the exclusion of grey literature, these findings should be interpreted as a partial map of the published peer-reviewed evidence rather than as a comprehensive representation of all relevant knowledge or practice in the field.

The full characteristics of the peer-reviewed sources included are provided in Supplementary Table S2.

3.2. Historical Perspectives on Indigenous Suicide

Indigenous peoples across the globe continue to face disproportionately high rates of suicide, depression, substance misuse, and interpersonal violence [16]. The cumulative effects of colonial expansion—including territorial dispossession, systemic abuse in state and religious institutions, and the fragmentation of kinship and family structures—have generated enduring intergenerational trauma, leaving profound psychological and social vulnerabilities that persist to the present [17–20]. Among Indigenous youth in urban contexts, struggles to sustain or reconcile cultural identity within dominant social frameworks are frequently accompanied by heightened risks of substance use and emotional suffering [21]. Overall, these studies demonstrate that contemporary Indigenous mental health crises are rooted less in individual pathology than in the long shadow of historical and structural violence, underscoring the urgency of culturally grounded, community-led approaches to healing and resilience.

Analyses of suicide among Indigenous peoples frequently return to the enduring consequences of colonisation; at the same time, historical accounts suggest that self-inflicted death was neither prevalent nor characteristic in precolonial times [22,23]. Within ancestral societies, such acts were contextually situated, embedded in relational and cosmological systems of meaning rather than understood as expressions of individual psychological disorder—a framing that resonates with the critique advanced by Ansloos and Peltier (2022) [24] who argue that dominant psychocentric models obscure the relational, structural, and justice-oriented dimensions through which Indigenous experiences of suicide must be understood.

Albert & Ramos' (2018) [25] edited volume, *Pacificando o Branco*, offers a foundational anthropological lens for interpreting intercultural mediation in the Guiana Shield as a cosmological process of ethical containment rather than simple acculturation. Its central idea—that Indigenous peoples "pacify the white" by domesticating the dangerous alterity

embodied by the State, missionaries, and medicine—illuminates the symbolic logic underlying community mediation in Amazonian health. Among the Wayãpi, "contact" does not refer to a discrete historical encounter or external intervention, but to a continuous moral and relational process through which foreign powers are incorporated, neutralised, and governed within Indigenous systems of reciprocity and control [26,27]. Contemporary CHWs, by translating biomedical discourse into local ontologies, continue this process of cosmological reconciliation, restoring balance between divergent moral worlds. Integrating this perspective reframes health mediation as a form of cosmopolitical healing, where to "heal" is also to tame and re-moralise external forces—transforming contact itself into a therapeutic act that safeguards Indigenous sovereignty and relational equilibrium.

The late nineteenth and early twentieth centuries marked a profound transformation. As colonial frontiers expanded through rubber extraction, evangelisation, and forced resettlement, Indigenous communities throughout Amazonia and the Guianas experienced unprecedented displacement, violence, and social disruption. Scattered accounts from missionaries and colonial agents during this period describe clusters of suicides associated with captivity, cultural dislocation, and the erosion of traditional authority, as noted by Father João Felipe Bettendorff in his *Chronicle of the Mission of the Fathers of the Society of Jesus in the State of Maranhão (1607–1698)* [28]. However, data remained absent, and suicide was not recognised as a collective or public health concern.

It was only during the mid-twentieth century—and more visibly from the 1970s onward—that suicide began to emerge as a documented epidemic among certain Indigenous populations, particularly in circumpolar regions, North America, and later the Amazon basin [15]. The rise in youth suicide coincided with intensified missionisation, schooling, urbanisation, and sedentarisation, processes that undermined traditional cosmologies and displaced shamanic systems of meaning and mediation.

From a historical perspective, suicide among Amerindian peoples represents not a continuity of ancestral practice but a colonial-modern rupture. Whereas earlier forms of self-inflicted death were embedded within shared cosmologies and relational ethics, contemporary patterns of suicide reflect the fragmentation of those very worlds. The crisis of social connectedness observed today in industrialised societies [29,30] finds a structural equivalent in the colonial trajectories of Amerindian communities. The accelerated disruptions of social capital produced by digital networks and smartphone use also resonate within Amazonia, where external forces have similarly transformed the fabric of relational life. In both contexts, the rapid reconfiguration of modes of relationship—whether social or cosmological—engenders a disorientation of the self and a symbolic disaffiliation that become sources of psychological suffering and suicidal behaviour.

Haidt's *The Anxious Generation* (2024) [30] offers a contemporary comparative reference for the relational dimension of mental suffering. His concept of the "Great Rewiring" suggests that digital hyperconnectivity may disrupt embodied, communal, and intergenerational relations, with implications for youth mental well-being. In Amazonian Indigenous settings, this analogy is relevant only in a limited sense, as rapid technological change may interact with relational environments already affected by colonial rupture and social transformation. In this scoping review, however, Haidt is cited solely as an interpretive point of comparison and not as a central component of the evidence map.

In recent years, the expansion of mobile networks and satellite Internet has introduced rapid digital connectivity into Amazonian territories, reaching even remote Indigenous communities through platforms such as WhatsApp, Facebook, and Instagram. Although these technologies often arrived later than in urban areas, they have increasingly reshaped the texture of relational life. Among younger generations, social media use now frequently replaces traditional forms of embodied interaction and intergenerational exchange,

contributing to new experiences of exposure, comparison, and isolation. The arrival of permanent digital connectivity—sometimes through programmes like Starlink installations in remote villages—creates both opportunities for visibility and risks of disconnection, as communication shifts from ritual and place-based sociality to mediated, individualised forms of exchange. These changes echo what Haidt (2024) [30] terms the "anxious generation", suggesting that the psychosocial effects of digital life observed in industrialised societies may also emerge, under different conditions, within Indigenous Amazonia. Understanding these dynamics is essential for mental health research and suicide prevention in the region, where the intersection of cosmological rupture and digital transformation may further destabilise already fragile relational ecologies.

Understanding this shift is essential to any analysis of suicide in Amazonia and the Guiana Shield today, where relational ontologies persist amid ongoing colonial and developmental pressures, and where community health workers and CHWs are emerging as vital agents in the restoration of social and spiritual continuity.

3.3. Epidemiology of Indigenous Suicide in Amazonia

As summarised in Table 2, suicide rates among Amerindian populations in Amazonia and the Guianas vary markedly across settings, with particularly high rates reported in some Indigenous communities.

Table 2. Suicide Rates Among Amerindian Populations in Amazonia and the Guianas.

Population/Location	Suicide Rate (per 100,000)
Emberá Dobidá (community, Colombia)	247.9
Trois-Sauts (French Guiana)	137.0
Camopi (French Guiana)	113.0
Upper Solimões (Brazil)	111.7
Amazonas state (Brazil, Indigenous)	44.9
São Gabriel da Cachoeira (Brazil)	41.9
Brazil (national, Indigenous)	17.6

Source: Regional comparative data.

The burden of mental health problems in Amazonian Indigenous communities is especially acute. Suicide rates among Indigenous youth in Brazil and French Guiana are not only higher than national averages but, in certain communities, rank among the highest recorded worldwide [31,32]. Such outcomes are closely tied to cultural disruption, intergenerational trauma, and substance misuse—particularly alcohol—exacerbated by rapid socio-environmental change and the erosion of protective cultural continuities and intergenerational bonds. Unlike in many other regions, where Indigenous suicide rates approach national parity, Amazonia has repeatedly emerged as a hotspot of mental health inequities. A global systematic review of 99 studies across 30 countries reported suicide incidences ranging from 0 to 187.5 per 100,000 among Indigenous populations, highlighting marked heterogeneity and the importance of local context [15].

Brazil. In Brazil, suicide among Indigenous peoples has risen sharply over the past two decades. In Amazonas, rates climbed from 0.99 per 100,000 in 2000 to 44.94 per 100,000 in 2014, with the highest burden among youth aged 10–24 [33]. By 2020, national Indigenous suicide incidence reached 17.57 per 100,000, compared with 6.35 per 100,000 among non-Indigenous Brazilians [33]. In the Upper Solimões (Tabatinga), correction for misclassified deaths yielded an incidence of 111.7 per 100,000 (95% CI: 84.6–148.6), with 17.2% of suicides initially coded under alternative causes [34]. In São Gabriel da Cachoeira (Alto Rio Negro), Indigenous rates reach 41.9 per 100,000—twenty times higher than among non-Indigenous residents of the same municipality [32]. In Mato Grosso do Sul, the Guarani-Kaiowá exhibit

some of the highest rates globally, linked to land dispossession, structural marginalisation, and intergenerational trauma [32].

Colombia and Ecuador. Similar patterns appear elsewhere in the basin. In Colombia, departments such as Vaupés face a major public health challenge, with explanatory models rooted in sociocultural and structural determinants rather than individual psychopathology [35]. Among the Emberá Dobidá, rates of 247.9 per 100,000 have been reported in a single community [36]. In Ecuador, Amazonian provinces such as Napo and Orellana report rates above national averages (12.63 and 11.36 per 100,000, respectively), although ethnicity-disaggregated data remain unavailable [37]. Adolescent-focused studies nevertheless indicate disproportionate Indigenous risk [38].

The Guianas. Across the Guianas, vulnerabilities are also evident. Guyana ranks among the countries with the highest suicide rates in the Americas, yet suffers from limited ethnicity-disaggregated surveillance; Amerindian communities are considered particularly at risk [39]. In Suriname, district-level data from Nickerie reported an incidence of 48 per 100,000 and an attempt incidence of 207 per 100,000 (2000–2004), with pesticide ingestion predominant [40]. In French Guiana, the situation is especially severe: in the Amerindian communes of Camopi and Trois-Sauts (2008–2015), suicide incidence reached 113 and 137 per 100,000, with attempt incidences of 265–413 per 100,000—over ten times the rate observed in mainland France [31,41]. Youth aged 10–29 represent the majority of deaths, and hanging is the dominant method [31]. Structural determinants—including isolation, acculturation, substance use, and erosion of future prospects—repeatedly emerge as core drivers [31].

Peru, Bolivia, and Venezuela. In Peru, national data show rising rates (1.44 to 1.95 per 100,000 between 2017 and 2019), with limited ethnicity-specific information for Amazonian departments [42]. In Bolivia, multi-source evidence identifies pesticide self-poisoning as the main mechanism, alongside major data gaps in Amazonian regions [43,44]. In Venezuela, recent global analyses report one of the highest firearm-related suicide mortalities worldwide; however, ethnicity-disaggregated Amazonian data remain absent [45,46].

Synthesis. Overall, Amazonia and the Guiana Shield represent a region of extreme vulnerability coupled with chronic data scarcity. The highest documented incidences occur in Indigenous communities of Brazil and French Guiana [34,41], while many neighbouring countries lack ethnicity-specific surveillance. Strengthening mortality monitoring, integrating ethnicity identifiers, and developing community-based, culturally informed prevention strategies are essential. Anthropological perspectives from French Guiana underscore how mental distress is embedded in cultural rupture, institutional neglect, and tensions between universalist policy models and local realities [47–50]. Together, these findings emphasise that prevention must address not only clinical needs, but also historical, cultural, and structural determinants.

3.4. Cultural Interpretations of Mental Suffering

Durkheim's analytical typology of suicide is grounded in his theorisation of social integration and social regulation as key determinants of individual trajectories. Anomic suicide reflects a deficit of regulation, characteristic of contexts marked by normative dislocation, abrupt social change, or institutional instability that disrupts frameworks of expectation. Conversely, egoistic suicide is associated with insufficient integration, where weakened collective bonds fail to provide meaning, support, or moral cohesion. These two lenses are still pertinent in the Amazonian context. Over a century after Durkheim's *Le Suicide* (1897) [1], Putnam's Bowing Alone (2000) [29] provides a valuable lens for understanding the relational foundations of mental health and community resilience. His concept of social capital—the networks of trust, reciprocity, and cooperation that sustain collective

life—resonates with the work of community health workers and intercultural CHWs in Amazonia. Just as Putnam links civic engagement to psychological well-being, Indigenous CHWs foster both bonding within communities and enhanced connection between Indigenous and institutional worlds. By fostering trust, participation, and shared meaning, they counteract the "social isolation" that Putnam identifies as a modern pathology, demonstrating that social cohesion is not merely a cultural value but a determinant of mental health and collective resilience.

Expanding this relational perspective, Nettleton et al. (2007) [51] emphasise that Indigenous peoples conceive health as an ecological and spiritual equilibrium between people, land, and spirit. In their international study *Utz Wachil*, well-being depends on maintaining this balance, while illness arises when these interconnections are disrupted. Healing thus entails restoring harmony through ritual, reciprocity, and respect for the environment—a conception that parallels Amazonian cosmologies, where well-being extends across both human and non-human worlds.

From this standpoint, suicide in Indigenous societies cannot be adequately understood through biomedical frameworks alone. It represents not a purely psychological pathology but a disruption of social and cosmological balance. Ethnographic studies among the Teko and Wayãpi in French Guiana and the Desana in Brazil describe suicides attributed to sorcery or malevolent spirits, reflecting moral and spiritual rupture rather than autonomous intent [52,53]. Wayana testimonies link such acts to communal festivities and alcohol use, underscoring the interplay of social, ritual, and emotional forces [54]. In the Alto Rio Negro, suicide is perceived as a breakdown in kinship and collective relations [53]. These perspectives frame self-destruction as a form of collective suffering rooted in historical dispossession and social change, highlighting the need for culturally sensitive strategies through which CHWs translate and reconcile biomedical and Indigenous explanatory systems.

Recurrent sociocultural risk factors align with these interpretations. Acculturation and the loss of traditions—through externally imposed settlement in permanent villages, schooling away from family environments, and the erosion of parental authority—undermine frameworks of identity and belonging [52,55]. Alcohol and substance use often act as facilitating conditions, lowering inhibitions during social gatherings and precipitating impulsive acts [55]; cannabis and, more recently, crack cocaine are associated with recurrent attempts [41]. Intergenerational tensions and family conflicts are common precipitants, with suicides frequently following disputes or romantic breakups [54]. Isolation and schooling-related ruptures are equally salient: adolescents leaving villages to study on the coast may experience discrimination and precarious living conditions, resulting in marginalisation both in urban settings and upon returning to their home communities [56]. Land conflicts and dispossession remain critical, exemplified by the Guarani-Kaiowá in Brazil, where territorial loss and systemic violence underpin extreme rates [32]. These interlocking dynamics indicate a syndrome of cultural, economic, and social dislocation, aligning with Durkheim's (1897) [1] notion of *anomie sociale*. Taken together, these findings suggest the importance of distinguishing between contributors to distress and suicidal behaviour—such as cultural disruption, substance misuse, family conflict, schooling-related rupture, and territorial dispossession—and buffers against them, including social cohesion, cultural continuity, meaningful participation in community life, and trusted mediating relationships. Some domains may be ambivalent rather than uniformly protective or harmful: depending on their form and social expression, religious practice, family relations, schooling, or participation in collective life may either reinforce belonging and support or intensify conflict, exclusion, shame, or dislocation.

3.5. Role of Community Health Workers

Community health workers (CHWs) have been increasingly studied for contributions to mental health promotion in culturally plural and low-resource settings. Despite variation in context and role, the literature identifies recurrent functions: early detection of psychological distress; cultural and linguistic mediation; psychoeducation; psychosocial support; facilitation of treatment adherence; crisis response; and advocacy on social determinants. Their potential contribution appears to stem from proximity and trust: embedded within local social networks, CHWs and Indigenous CHWs may help identify distress, reduce stigma, and connect Indigenous and biomedical systems of care, although the available evidence remains largely descriptive and uneven. Evidence from Latin America, South Asia, and the circumpolar North consistently highlights this intermediary role [31,52,57–60]. For clarity and consistency, the term CHW is used to encompass both formally institutionalised Indigenous Health Agents and community-based intercultural CHWs.

Key functions

Early detection and crisis response: Close household contact allows early identification of distress. In Brazil's DSEIs, Indigenous agents detect depressive symptoms and self-harm risks during household visits [58,60]. In French Guiana, CHWs attached to remote health centres or NGOs detect suicidal ideation in villages such as Camopi and Trois-Sauts and enable rapid referral to mobile psychiatry teams [31,41]. Their embeddedness also makes them first responders in acute crises, mobilising kin networks and emergency services.

Cultural mediation and trust: Bicultural and bilingual CHWs link biomedical and Indigenous epistemologies; in Brazil, they mediate between professional teams and shamans to facilitate culturally congruent care [60]. Among Inuit and First Nations, culturally grounded social support is linked to improved outcomes [57,58]. In French Guiana, CHWs translate psychiatric concepts into local explanatory frameworks, often invoking spiritual causation [52].

Psychosocial support and education: Even without specialist training, lay counsellors can deliver effective interventions; in Goa, behavioural activation and problem-solving reduced anxiety and depression [59]. Comparable low-intensity support occurs in Amazonia, where CHWs accompany patients, translate procedures, and reduce stigma [61]. Educational work further reinforces prevention: Nepal's Female Community Health Volunteers (FCHVs) reduced stigma and encouraged help-seeking [62], with similar participatory methods in Amazonia [60].

Continuity of care and advocacy: By maintaining contact between patients, families, and institutions, CHWs sustain adherence and follow-up [57,58,60]. In French Guiana, CHWs accompany youths after attempts and facilitate reintegration. They also address social determinants by linking families to educational and welfare programmes [60,62].

Coordination with traditional healers: CHWs align biomedical and spiritual approaches—integrating shamans into therapeutic discussions in French Guiana [52] and collaborating in community rituals blending psychosocial and spiritual healing in Brazil (Souza & Ferreira, 2014) [63].

3.6. Evidence Mapped on Outcomes and Service Strengthening

French Guiana.

In Antecume Pata, one report describes a ten-year period without reported suicides in a context of sustained NGO and CHW engagement, supported by a sentinel system for early detection [31]; however, this observation should be interpreted descriptively and not as evidence of causal effectiveness. In Camopi, participatory prevention programmes reinforced community ownership. The Cellule Référente pour le Mieux-Être des Populations de l'Intérieur (CeRMEPI) trained CHWs to consolidate prevention networks [41],

and since 2019, nurse–mediator pairs have strengthened follow-up [64]. Regionally, suicide prevention is coordinated by the Centre Ressource Prévention Suicide (CRPS) at the Centre Hospitalier de Cayenne (CHC), which acts as the territorial observatory for suicide, trains professionals, and deploys the Équipe Mobile Prévention au Suicide for emergency psychiatric response, linking hospital psychiatry with community CHWs. Taken together, these sources describe mediation capacity and strengthened interfaces between remote communities and services as important components of prevention and care pathways in the region, although robust impact evaluations remain limited and causal inference cannot be drawn from the available evidence.

Brazil.

The institutionalised *Agentes Indígenas de Saúde* (AIS) system, integrated into SESAI's DSEIs, has been described as strengthening communication, trust, and adherence in sensitive areas of care [32,60]. Suicide prevention and crisis management form part of the national training curriculum [65,66]. Among the Mbya-Guarani, *Xondaro Marãgatu* counsellors have been described in the literature as contributing to the reduction in alcohol-related harms and suicide risk [67]. During COVID-19, the UNICEF/FIOCRUZ/COIAB *Bem Viver* Project reinforced intercultural support for Indigenous youth [63]. Where mediator roles are institutionalised—AIS in Brazil or sentinel networks in French Guiana—some reports describe periods of lower recorded suicide incidence, but these observations do not establish causal effects. Overall, the mapped peer-reviewed evidence suggests the potential importance of institutional embedding and intercultural competence, while indicating that rigorous impact evaluations remain scarce.

3.7. Comparative Models: Brazil and French Guiana

Institutionalisation versus project-based mediation. Brazil maintains one of the world's most structured Indigenous CHW systems: salaried AIS integrated into the Ministry of Health via DSEIs delivering prevention, health promotion, and suicide prevention services [32,60,68]. French Guiana, in contrast, relies on NGO- and project-based mediation (e.g., ADER, DAAC Guyane, Groupe SOS), coordinated with the CHU de Guyane and ARS Guyane [64]. Despite new training programmes and the nurse–CHW model, lack of statutory status and funding instability persist.

Common challenges and intercultural approaches. Both systems face limited professional recognition and risk of burnout among CHWs exposed to community trauma [69,70]. Intercultural initiatives—*Bem Viver* and *Xondaro Marãgatu* in Brazil [63,67] and psychiatric–shamanic collaborations in French Guiana [52]—demonstrate that CHWs act not merely as translators but as cultural brokers redefining therapeutic practice.

Lessons from other Amazonian contexts. Elsewhere, CHW models remain largely volunteer-based. In Peru, Ecuador, and Bolivia, *promotores* extend primary-care coverage but face irregular support [71].

Comparable findings have been reported in the Peruvian Amazon, where community health workers (CHWs) expanded their functions during the COVID-19 crisis to fill the vacuum left by a collapsing health system. Using community-based participatory research and the Photovoice method, Ref. [72] documented how Kukama-Kukamiria CHWs assumed leadership in health delivery, integrated medicinal-plant knowledge with public health messaging, and provided emotional and logistical support amid collective trauma. Their "call to action" for accreditation, remuneration, and standardised training resonates with ongoing demands across Amazonia for the formal recognition of CHWs as legitimate health actors. Beyond infectious-disease control, the study highlights CHWs' psychosocial role in sustaining trust, relational care, and community cohesion—key protective factors against mental health deterioration. These insights reinforce the present review's argument

that CHWs and intercultural CHWs act as boundary figures between biomedical and Indigenous ontologies of suffering, thereby enhancing the cultural legitimacy and resilience of health systems in Amazonia.

In Suriname, the *Medische Zending* deploys community assistants for Indigenous and Maroon groups [73]. In Guyana, Venezuela, and Colombia, outreach brigades operate with limited institutional backing. These systems expand reach but lack the stability of Brazil's AIS or the evolving CHW framework in French Guiana. Across contexts, the available literature suggests that community health CHWs and Indigenous Health Agents may be important for culturally adapted mental health and suicide prevention strategies; however, this interpretation should remain cautious, as the peer-reviewed evidence base is limited, uneven across countries, and still relies heavily on descriptive and implementation-oriented sources.

French Guiana contextualised within the comparison. French Guiana is a pivotal setting for understanding Indigenous mental health in Amazonia. Despite belonging to a high-income European welfare state, Amerindian communities face suicide rates among the highest worldwide: in Camopi and Trois-Sauts, estimates reach 113 and 137 per 100,000 annually, with attempts approaching 400 per 100,000—exceeding mainland France by more than eightfold and disproportionately affecting those aged 10–29 [31,41]. The paradox lies in the coexistence of advanced institutional resources and persistent structural inequities, in a context of geographic isolation and insufficient adaptation of services to cultural and linguistic diversity [48–50]. Unlike Brazil, where Indigenous Health Agents are formally embedded, CHWs in French Guiana are predominantly affiliated with NGOs or regional projects, yielding innovation but institutional fragility. This juxtaposition—Brazil's institutionalised national system versus French Guiana's project-based mediation—offers a unique comparative lens on governance, sustainability, and intercultural adaptation across Amazonia. The above specific systems are summarised in Table 3.

Table 3. CHW and mediator systems in Amazonia and the Guianas.

Region/Country	System Model and Key Interventions	Actors Involved	Outcomes/Evidence	Structural Limits and Lessons
French Guiana	Project-based mediation and sentinel systems (Antecume Pata, Camopi), CeRMEPI training network, CRPS coordination, EMIC crisis response, nurse–mediator pairs	CHWs, NGOs (ADER, DAAC, Groupe SOS), CeRMEPI, CRPS-CHC, nurses, shamans (intercultural collaborations)	Sentinel system led to 10-year suicide-free period in Antecume Pata; strengthened follow-up and community prevention (Guarmit, Pacot, Gaillet)	Innovative intercultural model but institutional fragility due to NGO-based contracts and lack of statutory recognition
Brazil	Institutionalised Indigenous Health Agents (AIS) within SESAI/DSEI, national suicide prevention training, Bem Viver and Xondaro Marãgatu programmes	AIS (CHWs), Ministry of Health (SESAI), NGOs, community counsellors	Increased trust, adherence, reduced alcohol misuse and suicide risk in targeted groups; strong youth support during COVID-19	Stable national structure, but CHW burnout and territorial inequalities persist; institutionalisation is protective

Table 3. *Cont.*

Region/Country	System Model and Key Interventions	Actors Involved	Outcomes/Evidence	Structural Limits and Lessons
Peru, Ecuador, Bolivia	Volunteer-based CHW and *promotor* networks with limited support; expanded roles during crises (e.g., COVID-19 in Peruvian Amazon)	CHWs/promotores	Expanded reach and psychosocial support during crises (e.g., Kukama-Kukamiria), integration of medicinal plants and public health messaging	Lack of salary, accreditation, and structured support; systems fragile but culturally embedded
Suriname, Guyana, Venezuela, Colombia	Outreach brigades and community assistants (e.g., Medische Zending in Suriname)	Community assistants, mobile teams	Improved reach in remote areas	Weak institutional backing; coverage without sustainability

3.8. Policy and Research Implications

Translating global patterns into local priorities. The global literature shows Indigenous mental health inequities are widespread and heterogeneous; incidence ranges from parity to the highest rates worldwide depending on colonisation histories, cultural disruptions, and access to services [15]. Across regions, a recurring theme emerges: community-based actors—particularly Indigenous CHWs—are indispensable in mediating between biomedical systems and local cultural frameworks of well-being [58,60]. This dual insight—that risk is context-dependent and that resilience often flows from culturally grounded engagement—justifies a focused lens on Amazonia, and specifically French Guiana. Future research and programme design would benefit from distinguishing more explicitly between contributors to distress and locally effective buffers, while recognising that some social institutions or practices may function in either direction depending on context.

Surveillance and data equity. Amazonia stands out as both a hotspot of Indigenous suicide and a site of pronounced data invisibility. Many countries lack ethnicity-disaggregated surveillance systems, resulting in underestimation of the crisis [34,41]. Strengthening routine ethnicity identifiers and stable, small-area monitoring is crucial to inform prevention and resource allocation.

System organisation and the role of CHWs. Where evidence exists, it reveals not only elevated youth suicide but also the central role of CHWs—denominated *agentes indígenas de saúde* in Brazil or intercultural CHWs in Ecuador and French Guiana—in enabling culturally responsive care [58,60]. In French Guiana specifically, epidemiological studies confirm very high incidence in Camopi and Trois-Sauts with attempts disproportionately affecting youth [31,41]. The reliance on short-term project funding underscores the fragility of mediation structures and statutory frameworks that stabilise employment, training, and supervision while preserving intercultural dialogue mechanisms among CHWs, health professionals, and traditional healers.

Barry & Jenkins (2007) [13] provide a comprehensive framework situating community health work within the broader field of mental health promotion. They emphasise that positive mental health depends on social capital, empowerment, and participatory governance rather than solely on clinical interventions. Crucially, they identify community-based workers as key agents for building resilience and fostering psychosocial well-being, particularly in marginalised or culturally diverse populations. These insights are consistent with the present review's interpretation that community health workers and intercultural CHWs in Amazonia may play an important role in supporting relational and collective

dimensions of mental health. In contexts such as French Guiana and northern Brazil—where institutional fragility and cultural plurality converge—the WHO model proposed by Barry and Jenkins underscores the need for sustainable, equity-oriented systems that integrate CHWs as legitimate public health actors connecting community life, social cohesion, and care delivery. Recent initiatives also highlight the growing use of mobile and digital technologies—notably WhatsApp networks, radio messaging, and social media platforms—as tools for maintaining connection and continuity of care across vast and isolated territories. During the COVID-19 pandemic, community health workers in the Peruvian Amazon used these channels to share health information, provide psychosocial support, and mobilise collective responses [72]. Similar approaches in French Guiana and Brazil suggest that such digital communication may help reinforce trust, enable rapid alerts, and sustain relational care at a distance, potentially offering new possibilities for suicide prevention and early intervention in geographically dispersed communities.

Financing, training, and support. Sustainable financing beyond project cycles is essential to ensure continuity. Ongoing training that integrates biomedical content with intercultural competencies is needed to strengthen CHWs' capacities in suicide prevention and psychosocial support, complemented by supervision, peer networks, and psychosocial assistance to mitigate burnout [62].

Beyond structural reforms, Indigenous self-determination remains central to sustainable progress in mental health. Community-led initiatives in Amazonia—through Indigenous health councils, local prevention networks, and culturally grounded CHWs—demonstrate that resilience and innovation emerge from within communities themselves. Recognising and embedding these capacities into formal governance structures may help strengthen equity and support more culturally grounded intercultural mental health systems [41,60].

Research priorities. Rigorous impact evaluations assessing the effectiveness of CHW interventions on suicide and mental health outcomes remain scarce—especially outside Brazil [31]. Comparative evidence is uneven, with relatively rich data from Brazil but minimal peer-reviewed literature from Suriname, Peru, and Bolivia [42,71,74]. Future reviews could usefully incorporate grey literature and community-based documentation alongside peer-reviewed sources in order to capture programme experience that remains underrepresented in indexed academic databases. Ethnographic research should also document CHWs' own perspectives, role negotiations, and emotional burdens, and explore pathways for CHWs to move from auxiliary roles to leadership positions in designing and governing Indigenous mental health programmes. Collectively, these actions would strengthen the evidence base and support more equitable, intercultural mental health systems across Amazonia.

4. Limitations

This scoping review and evidence map has several limitations. First, it relies on published peer-reviewed studies, which excludes potentially important programme evidence contained in the grey literature, community reports, policy documents, and unpublished evaluations—sources that are often highly relevant in Indigenous and intercultural health contexts. Second, the Amazonia/Guiana Shield evidence map retained only eight peer-reviewed sources, indicating that the mapped literature is both small and unevenly distributed across countries. Third, searches were restricted to four major databases and to publications in English, French, Spanish, and Portuguese, which may have limited inclusion of studies from regions where other languages predominate. Fourth, variability in terminology and reporting across studies may have led to underrepresentation of certain community health worker cadres. Fifth, comparison of suicide data across settings may be

complicated by differences in census methods and surveillance systems. Finally, heterogeneity in study design and outcome measurement precluded meta-analytic synthesis and limited any strong inference regarding programme effectiveness.

Despite these limitations, the focus on CHWs in relation to mental health and suicide prevention in Amazonia remains novel and important, precisely because the peer-reviewed evidence base is still limited and uneven.

Future research could address these limitations by incorporating grey literature and community-based reports, extending searches to additional databases and languages, improving comparability in suicide surveillance and outcome reporting, and developing more standardised evaluative designs for CHW-related mental health and suicide prevention interventions in Indigenous Amazonian settings.

5. Conclusions

The mapped literature suggests that Community Health Workers (CHWs) and functionally equivalent cadres can play a key role in addressing mental health inequities among Indigenous populations in Amazonia, notably by acting as cultural and linguistic brokers between biomedical services and Indigenous worldviews. Across settings, sources describe CHWs supporting early identification of distress, psychosocial accompaniment, referral navigation, and—where locally appropriate—facilitating dialogue between health services and traditional healing practices. Descriptive accounts report that such practices may coincide with strengthened service relationships and, in some settings, periods of lower recorded suicide incidence; however, these observations should not be interpreted as causal effects, and the evidence base remains heterogeneous and uneven, with limited evaluative designs. Comparative mapping also highlights divergent organisational models: Brazil's institutionalisation of Indigenous Health Agents (AIS) offers greater stability and formal recognition, whereas French Guiana's more project-based mediation shows programmatic innovation but remains vulnerable to funding fragility and limited professional status. Given the small number of peer-reviewed sources retained for the Amazonia/Guiana Shield evidence map and the exclusion of grey literature, these conclusions should be read as a cautious synthesis of the published peer-reviewed evidence rather than as a comprehensive assessment of all relevant programmes and experiences in the region.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/psychiatryint7030094/s1, Table S1: Summary of Community Health Worker (CHW) Designations in Indigenous Contexts; Table S2: Characteristics of the peer-reviewed sources included in Stream 2 (Amazonia/Guiana Shield evidence map); Table S3: PRISMA_2020_checklist. References [60–62,75–134] are cited in the Supplementary Materials.

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