

## Local wisdom for mitigating HIV stigma and discrimination in Palopo, Indonesia: A qualitative study

Arlin Adam<sup>\*1</sup>, Zainuddin Zainuddin<sup>2</sup>, Irviani Anwar Ibrahim<sup>3</sup>

<sup>1</sup> Doctoral Program in Public Health, Universitas Mega Buana Palopo, Palopo, Indonesia

<sup>2</sup> Public Health Study Program, Universitas Pejuang Republik Indonesia, Makassar, Indonesia

<sup>3</sup> Department of Public Health, Universitas Islam Negeri Alauddin Makassar, Makassar, Indonesia

### ABSTRACT

HIV-related stigma and discrimination remain persistent barriers to HIV prevention and treatment, and prior studies show that biomedical services alone are often insufficient when stigma disrupts testing, disclosure, and retention in care, highlighting the novelty of culturally grounded stigma-mitigation strategies. This study examined the role of Bugis-Luwu local wisdom as a health intervention resource to reduce stigma and discrimination toward people living with HIV (PLHIV) in Palopo, Indonesia, and identified cultural mechanisms that can be integrated into HIV service programs. A phenomenological qualitative design was applied with in-depth interviews, participatory observation, and cultural document review involving PLHIV, customary leaders, religious leaders, health workers, community cadres, and HIV program managers. Data were analyzed using Braun and Clarke's thematic analysis, supported by triangulation and member checking. Findings indicate three interlinked cultural mechanisms with intervention relevance: (1) social-ethical values (*sipakatau*, *sipakalebbi*, and *sipakainge*) that reinforce dignity, respect, and non-judgmental guidance; (2) Customary council as a restorative forum to resolve conflict and reintegrate PLHIV; and (3) the moral authority of customary and religious leaders as trusted messengers capable of reframing HIV away from moral blame and toward public health support. Key challenges include misconceptions about HIV transmission, limited cultural integration in formal health programs, and social change weakening customary practices. Integrating local wisdom into health communication, community mobilization, and culturally safe service delivery may strengthen acceptability, sustainability, and equity of HIV interventions in Palopo.

### ABSTRAK

Stigma dan diskriminasi terkait HIV masih menjadi hambatan yang menetap bagi pencegahan dan pengobatan HIV, dan studi-studi sebelumnya menunjukkan bahwa layanan biomedis saja sering tidak memadai ketika stigma mengganggu tes HIV, keterbukaan status, dan retensi dalam perawatan; hal ini menegaskan kebaruan strategi mitigasi stigma yang berlandaskan budaya. Penelitian ini mengkaji peran kearifan lokal Bugis-Luwu sebagai sumber daya intervensi kesehatan untuk menurunkan stigma dan diskriminasi terhadap orang dengan HIV (ODHIV) di Kota Palopo, Indonesia, serta mengidentifikasi mekanisme budaya yang dapat diintegrasikan ke dalam program layanan HIV. Desain kualitatif fenomenologis digunakan melalui wawancara mendalam, observasi partisipatif, dan telaah dokumen budaya, melibatkan ODHIV, tokoh adat, tokoh agama, tenaga kesehatan, kader komunitas, dan pengelola program HIV. Data dianalisis menggunakan analisis tematik Braun dan Clarke, didukung triangulasi dan member checking. Hasil menunjukkan tiga mekanisme budaya yang saling terkait dan relevan bagi intervensi: (1) nilai etika sosial (*sipakatau*, *sipakalebbi*, dan *sipakainge*) yang menegaskan martabat, penghormatan, dan nasihat tanpa menghakimi; (2) musyawarah adat sebagai forum restoratif untuk menyelesaikan konflik dan mereintegrasikan ODHIV; serta (3) otoritas moral tokoh adat dan agama sebagai penyampai pesan yang tepercaya, mampu membingkai ulang HIV dari tuduhan moral menuju dukungan kesehatan masyarakat. Tantangan utama meliputi miskonsepsi tentang penularan HIV, keterbatasan integrasi budaya dalam program kesehatan formal, dan perubahan sosial yang melemahkan praktik adat. Integrasi kearifan lokal ke dalam komunikasi kesehatan, mobilisasi komunitas, dan layanan yang aman secara budaya berpotensi memperkuat penerimaan, keberlanjutan, dan keadilan intervensi HIV di Palopo.

### ARTICLE INFO

#### Keywords

culture; hiv; sipakatau; qualitative research; stigma

#### Article History

Submit : 10 December 2025

In Review : 15 December 2025

Accepted : 25 December 2025

### AUTHOR(S) INFO

#### Correspondence Email

arlin.adam73@gmail.com

#### Address

Jl. Opu To Sappaile, No.77 Kelurahan Boting, Kecamatan Wara  
Kota Palopo, Sulawesi Selatan 91913, Indonesia



## INTRODUCTION

HIV-related stigma and discrimination remain entrenched across various global contexts, affecting testing uptake, treatment adherence, and long-term health outcomes for people living with HIV (PLHIV). Despite decades of public health campaigns, stigma persists in both individual and institutional forms, often shaped by intersecting social determinants such as gender, socioeconomic status, and cultural norms (Mendez-Lopez et al., 2023; Krishnaratne et al., 2020). Public stigma, internalized stigma, and anticipated stigma co-exist and reinforce barriers to care, particularly in low- and middle-income countries. These manifestations are exacerbated by limited knowledge, socioreligious narratives, and inadequate health infrastructure, particularly in rural and semi-urban settings (Hedge et al., 2021; Bond et al., 2024).

Recent literature has underscored the inadequacy of purely biomedical approaches to HIV prevention and care, emphasizing the need for multilevel, culturally embedded interventions. Research suggests that stigma is produced and maintained by sociocultural narratives, including moral judgments, religious beliefs, and social exclusionary practices (Nyblade et al., 2020; Nutor et al., 2024). Cultural assets such as social networks, local wisdom, and traditional values—when effectively mobilized—can become powerful tools for stigma mitigation and health promotion (Reif et al., 2021; Celeste-Villalvir et al., 2023). These insights point to a growing consensus that effective HIV interventions must be community-driven, culturally resonant, and structurally integrative.

Although various studies have examined stigma in different sociocultural settings, there is a lack of specific inquiry into how local wisdom, particularly in culturally rich regions like Palopo, can serve as a strategic mechanism for stigma reduction. Existing frameworks highlight the transformative potential of culturally grounded approaches; however, implementation remains limited by a gap in context-specific evidence (Ferguson et al., 2023; Parker & Aggleton, 2003). Addressing this gap requires a systematic exploration of indigenous knowledge systems and their integration into HIV-related services to ensure more inclusive, sustainable, and equitable public health outcomes.

Several theoretical and empirical studies have laid the foundation for integrating culture into HIV interventions. The PEN-3 Cultural Model developed by Airhihenbuwa and Webster (2004) emphasizes the role of positive cultural values in health behavior change. It redefines culture not as a barrier but as a critical asset in designing interventions that resonate with the community's worldview. Similarly, Parker and Aggleton (2003) propose that stigma is not merely an individual attitude but a structural and symbolic process that must be challenged through culturally embedded strategies. Their conceptual framework advocates for health interventions that confront the social production of stigma through community participation and cultural validation.

Evidence from Southeast Asia also underscores the role of affirmative religious and cultural narratives in shaping public health acceptance. Sern and Zanuddin (2014) found that religious-based health messaging significantly improved stigma reduction among young Muslim populations in Malaysia. These findings reinforce the importance of involving religious and community leaders in framing HIV not as a moral failing but as a public health concern. Integrating such leaders into HIV discourse fosters trust, facilitates disclosure, and promotes health-seeking behaviors, particularly in conservative and tightly-knit communities.

While the theoretical and empirical foundations for culturally grounded interventions are well-established, few studies have examined their application in the specific context of Palopo, a city deeply rooted in Bugis-Luwu culture. Cultural values such as *Sipakatau* (humanizing others), *Sipakalebbi* (mutual respect), and *Sipakainge* (constructive admonition) serve as longstanding pillars of communal harmony. These principles could be harnessed as cultural capital in reducing stigma toward PLHIV. However, anecdotal evidence and qualitative reports indicate that despite these values, PLHIV in Palopo continue to face exclusion, judgment, and barriers to care, often underpinned by moral and religious discourse (Mei et al., 2025; Trickett, 2002).

This study addresses a critical gap by examining the disjunction between cultural ideals and social practices in the treatment of PLHIV in Palopo. It aims to analyze the role of local wisdom as a strategy for mitigating HIV-related stigma and discrimination and to identify the cultural mechanisms

that can be integrated into HIV service programs. By grounding the research in indigenous values and community perspectives, the study contributes a novel framework for culturally aligned stigma reduction in health interventions, offering actionable insights for policy-makers, service providers, and community stakeholders.

METHODS

This study employed a qualitative phenomenological approach to explore the lived experiences of people living with HIV (PLHIV) and to understand how communities in Palopo culturally interpret HIV and stigma within the Bugis–Luwu sociocultural context (Younas et al., 2025). A phenomenological design was selected to capture participants' subjective meanings, moral narratives, and culturally situated responses to HIV-related stigma and discrimination, as well as to identify locally grounded mechanisms that can inform culturally responsive health interventions.

The study was conducted in Palopo City, South Sulawesi, Indonesia, covering several sub-districts that have established HIV services and active customary/community structures. Data collection took place over three months. The study population comprised PLHIV and key community stakeholders involved in social, cultural, religious, and health service environments influencing HIV discourse and care engagement. Participants included PLHIV, customary leaders and community elders, religious leaders, HIV service health workers, and community cadres/social workers who support PLHIV.

Participants were recruited using purposive sampling to ensure representation of key perspectives relevant to stigma formation and mitigation, complemented by snowball sampling to access hidden or hard-to-reach participants, particularly PLHIV who may avoid public identification due to stigma. The final sample consisted of 10 PLHIV with diverse backgrounds, 5 customary leaders/community figures, 5 religious leaders, 4 health workers providing HIV services, and 3 cadres/social workers/PLHIV companions. Inclusion criteria for PLHIV were: (1) aged ≥18 years; (2) diagnosed with HIV and residing in Palopo; (3) willing and able to communicate experiences related to stigma/discrimination and service access; and (4) providing informed consent. Inclusion criteria for community stakeholders were: (1) currently holding recognized roles as customary leaders, religious leaders, health workers, cadres, or PLHIV companions in Palopo; (2) having experience interacting with PLHIV or involvement in HIV-related community or service contexts; and (3) providing informed consent. Exclusion criteria for all groups included inability to participate due to severe illness or unwillingness to complete the interview.

Table 1  
Characteristics of research informants

Informant Code	Informant Category	Gender	Age (years)	Role/Background	Length of Involvement (years)
I1	PLHIV	M	32	Private-sector employee	4
I2	PLHIV	F	28	Housewife	3
I3	PLHIV	M	41	Self-employed	6
I4	PLHIV	F	35	Employee	5
I5	PLHIV	M	29	Informal worker	2
I6	PLHIV	F	38	Trader	7
I7	Traditional leader	M	55	Head of traditional institution	20
I8	Traditional leader	M	61	Customary leader	25
I9	Religious leader	M	50	Imam/Islamic preacher	18
I10	Religious leader	F	46	Religious counselor	15
I11	Health worker	F	34	HIV counselor	8
I12	Health worker	M	39	HIV service physician	10
I13	Community cadre	F	42	PLHIV peer supporter	9

Note: PLHIV = People Living with HIV; M = Male; F = Female

Data were collected through three complementary techniques to enhance depth and credibility: (1) in-depth interviews using a semi-structured guide to explore experiences of stigma and discrimination, disclosure concerns, barriers and facilitators to accessing services, interpretations of HIV within moral and cultural frames, and perceived roles of sipakatau, sipakalebbi, and sipakainge in social responses to PLHIV; (2) participatory observation to document cultural events, community meetings, informal interactions, and social practices involving customary and religious actors, as well as contextual features relevant to stigma production or mitigation; and (3) document review of cultural texts, customary notes, sermon materials, community communications, and relevant literature describing Bugis–Luwu values (including sipakatau) and local customary procedures. Field notes were maintained throughout, capturing non-verbal cues, setting descriptions, and reflective memos to support analytic rigor.

All interviews were conducted in a setting chosen by participants to ensure comfort and confidentiality. Interviews were audio-recorded with permission and supplemented with written notes. To protect confidentiality—particularly for PLHIV—pseudonyms/codes were used, and identifying information was removed during transcription. Data management included secure storage of recordings, transcripts, and field notes with restricted access to the research team.

Data analysis followed Braun and Clarke's thematic analysis procedures. The analytic process included: (1) familiarization with the data through repeated reading of transcripts and field notes; (2) initial coding to identify meaningful units relevant to stigma, discrimination, cultural meanings of HIV, and local wisdom mechanisms; (3) generation of preliminary themes by clustering related codes; (4) reviewing and refining themes by checking coherence within themes and distinctiveness across themes; (5) mapping relationships among themes (e.g., linking moral narratives, community practices, and cultural mitigation pathways); and (6) producing the thematic narrative that integrates participant accounts with the cultural context and intervention implications. The credibility of interpretation was strengthened through iterative team discussions and analytic memoing.

Trustworthiness was ensured through methodological triangulation (interviews, observation, and documents), source triangulation (PLHIV and multiple stakeholder groups), and member checking by returning key interpretations or summaries to selected participants to confirm accuracy and resonance. An audit trail documenting recruitment decisions, interview guides, coding iterations, and theme development was maintained to support dependability and confirmability. Participant characteristics were summarized descriptively (See [Table 1](#)) to demonstrate heterogeneity across PLHIV and stakeholder groups and to support transferability of the qualitative insights.

Ethical considerations included explaining study aims, procedures, risks, and benefits to all participants prior to data collection. Written or verbal informed consent (as appropriate to local feasibility and participant preference) was obtained before interviews and observations. Participants were informed of their right to withdraw at any time without consequences. Given the sensitivity of HIV status and stigma, interviews were conducted with strict confidentiality procedures, and referral information for psychosocial or counseling support was made available if participation elicited distress.

## RESULTS AND DISCUSSION

### Forms and expressions of HIV-related stigma and discrimination in Palopo

[Table 2](#) summarizes six subthemes that capture both the lived impacts of HIV-related stigma and the culturally grounded pathways for stigma mitigation in Palopo. The first two subthemes reflect how stigma is experienced by PLHIV: feelings of shame and fear of disclosing HIV status, and social responses of avoidance and exclusion that constrain everyday interactions. The remaining four subthemes highlight the intervention potential of Bugis–Luwu local wisdom as social capital: *sipakatau* emphasizes protecting human dignity and discourages humiliating or devaluing PLHIV; non-judgmental advising aligns with *sipakainge*, where misconceptions about HIV are corrected gently rather than through anger or blame; and customary deliberation (*musyawarah adat*) functions as a restorative mechanism to repair social relationships and prevent exclusion. In addition, religious leaders are shown to shape public opinion effectively by providing trusted, practical clarification (e.g., that HIV is not transmitted through handshakes), which can rapidly shift community attitudes. Overall, the

**Table 2**  
Summary of themes and key interview quotes

Subtheme	Representative Informant Quotation
Feelings of shame and fear of disclosing status	"I am afraid people will find out, because I will surely be viewed differently, as if I am a carrier of the disease." (I2, PLHIV)
Avoidance and social exclusion	"Once people know, they start keeping their distance. No one wants to sit close." (I4, PLHIV)
Respecting the dignity of PLHIV	"In our tradition, sipakatau is fundamental. We must not humiliate others, especially those who are ill." (I7, Traditional leader)
Advising without judging	"If there is a misunderstanding about HIV, we remind them gently, not with anger." (I9, Religious leader)
Restoration of social relationships	"We usually gather the community and discuss things properly so that no one is excluded." (I8, Traditional leader)
Influence on public opinion	"When the religious leader explains that HIV is not transmitted through handshakes, the congregation immediately changes their attitude." (I10, Religious leader)

Note: PLHIV = People Living with HIV

table indicates that stigma operates at individual and social levels, but it can be addressed through culturally legitimate values, forums, and influential actors that are feasible to integrate into HIV service and health promotion programs.

The study shows that local wisdom in Palopo has tangible potential to mitigate HIV-related stigma and discrimination, yet stigma persists in layered forms that continue to shape social relations and service engagement. The thematic analysis identified three dominant stigma forms reported by people living with HIV (PLHIV): (1) personal stigma, expressed as shame, self-blame, anxiety, and fear of disclosure; (2) social stigma, reflected in avoidance, reduced interaction, community gossip, and subtle exclusion; and (3) institutional stigma, experienced as unfriendly treatment in public settings or non-medical services and barriers in everyday civic life. Interview accounts illustrate the salience of disclosure fear—e.g., "I am afraid people will know they will see me differently" (I2, PLHIV)—and social distancing—e.g., "people start keeping their distance" (I4, PLHIV). A strong moralized narrative remains prominent, including framing HIV as "punishment" or the consequence of "deviant" behavior, reinforcing blame and legitimizing discrimination within everyday discourse (Trickett, 2002).

These findings align with evidence that stigma operates across micro (internalized/anticipated), meso (community relations), and macro/institutional levels, with moral judgment and misinformation acting as key drivers of avoidance and reduced care engagement (Nyblade et al., 2020; Krishnaratne et al., 2020; Kerr et al., 2024). The Palopo data parallel qualitative reports from other settings showing that disclosure remains constrained by fear of negative social labeling even where general awareness has improved (Hedge et al., 2021; Bond et al., 2024). Consistent with cross-national work, stigma is patterned by social determinants and contextual norms rather than being a purely individual attitude (Mendez-Lopez et al., 2023). The added value of the present study is that it does not merely document stigma categories; it demonstrates how local cultural ethics and community governance practices can function as *operational stigma-mitigation resources* (not only abstract values) within a Bugis–Luwu cultural context. This extends the general argument that biomedical pathways implicitly assume stigma-free access and that medical interventions alone will underperform without multilevel stigma reduction (Nyblade et al., 2020; Kerr et al., 2024).

The persistence of internalized and anticipated stigma indicates that interventions must incorporate psychosocial supports and social protection mechanisms alongside clinical services. Consistent with evidence that social support and peer networks buffer stigma and improve psychosocial well-being and care engagement (Reif et al., 2021), the Palopo findings suggest that strengthening culturally safe spaces for disclosure, peer accompaniment, and community reassurance is essential. In practical terms, stigma measurement and program monitoring should include indicators capturing disclosure concerns, social distancing behaviors, and institutional



experiences, so that improvements in biomedical outcomes (testing, ART adherence, retention) can be linked to changes in stigma “touchpoints” across daily life.

## Local wisdom as a culturally grounded mitigation mechanism (three thematic pathways)

The central results indicate that Bugis–Luwu local wisdom functions as social capital that can reduce stigma through three interrelated pathways. Theme 1—*Sipakatau*, *sipakalebbi*, *sipakainge* as anti-stigma social ethics: community leaders and participants described *sipakatau* (humanizing others) as a moral baseline that prohibits humiliation of sick persons and encourages confidentiality, equal treatment, and emotional support. *Sipakainge* (mutual reminding) emerged as an educative method that corrects misinformation “slowly, not angrily,” enabling stigma correction without public shaming, while *sipakalebbi* (mutual respect) frames the ethical obligation to protect dignity and reputation. Theme 2—*Musyawarah adat* as a restorative social mechanism: customary deliberation provides a culturally legitimate forum to repair relationships after discrimination occurs, reassert norms of solidarity, and reintegrate PLHIV into community life through respectful mediation. Theme 3—Local customary and religious leaders as cultural gatekeepers: trusted leaders shift public opinion by translating HIV knowledge into locally acceptable narratives; participants emphasized that when an *ustaz* clarifies that HIV is not transmitted through everyday contact, congregants’ attitudes change quickly.

The findings are consistent with cultural models arguing that stigma is socially produced by moral norms and structures and therefore requires culturally embedded, community-participatory strategies rather than purely medical responses (Parker & Aggleton, 2003). The PEN-3 Cultural Model similarly positions culture as a resource that can be leveraged as “health capital” to shape health behavior and social norms (Airhihenbuwa & Webster, 2004). In Palopo, the novelty is the identification of specific indigenous mechanisms—ethical vocabulary (*sipakatau/sipakalebbi/sipakainge*), deliberative governance (*musyawarah adat*), and leader-mediated translation—as concrete “delivery channels” for stigma reduction. This granular mechanism-mapping responds to systematic review findings that interventions are heterogeneous and that integrated, country-tailored strategies are needed across settings and service touchpoints (Ferguson et al., 2023). It also parallels evidence that culturally relevant frameworks and community voice improve HIV service uptake among stigmatized groups (Kang et al., 2025) and reinforces how trusted actors (elders, leaders, community networks) can enhance acceptability and sustainability (Mendelsohn et al., 2022; Stangl et al., 2021).

Operationalizing local wisdom provides a feasible pathway to integrate stigma mitigation into routine HIV programming. First, *sipakatau* can be translated into service charters and community commitments emphasizing dignity, confidentiality, and non-discrimination—supporting culturally safe care and strengthening patient trust. Second, *sipakainge* suggests a non-confrontational health communication style suitable for correcting misconceptions without triggering defensiveness, which can be integrated into counselor scripts, community dialogue, and religious sermons. Third, *musyawarah adat* can be adapted as a community restorative practice that complements facility-based stigma-reduction initiatives (Nyblade et al., 2020), linking community reintegration with continuity in care. Together, these mechanisms offer an equity-oriented approach that aligns with calls for tailored designs sensitive to gender, minority status, and local norms (Celeste-Villalvir et al., 2023), thereby enhancing the likely effectiveness of stigma reduction compared with one-size-fits-all messaging.

## Challenges and conditions for integrating local wisdom into HIV services

The study identified multiple constraints that shape feasibility and sustainability of local-wisdom integration: persistent moral framing of HIV as “sin” or high-risk sexual behavior, generational shifts away from customary practice, limited culturally grounded educational modules, constrained capacity among health workers to apply sociological–anthropological approaches, and weak cross-sector coordination among health offices, customary institutions, and religious leadership. These challenges indicate that cultural resources are present but not automatically activated; they require

deliberate program design, capacity building, and governance mechanisms to ensure consistent anti-stigma messaging and practice.

The identified barriers mirror implementation gaps documented in facility-centered and policy-centered approaches, where stigma reduction shows promise but often lacks rigorous formative work, sustained leadership, and integration with community-led action (Nyblade et al., 2020; Kerr et al., 2024). The continued moralization of HIV in Palopo reflects broader sociostructural stigma dynamics and helps explain why awareness alone does not guarantee reduced stigma or improved disclosure climates (Hedge et al., 2021; Bond et al., 2024). At the same time, the Palopo evidence underscores that cultural gatekeepers can either weaken or strengthen stigma depending on their HIV literacy—aligning with findings that health outcomes improve when messages are delivered through familiar cultural and religious narratives (Sern & Zanuuddin, 2014). By specifying the “failure points” (capacity, modules, coordination, generational distance), this study contributes implementable targets for improving cultural integration—moving beyond general recommendations toward actionable design requirements.

The results imply that effective stigma reduction in Palopo requires a coordinated, multilevel strategy that combines biomedical services with psychosocial supports, culturally anchored communication, and community governance mechanisms. Practically, HIV programs can: (1) co-develop culturally grounded anti-stigma modules with customary and religious leaders using *sipakatau/sipakainge* principles; (2) train health workers in culturally safe, non-moralizing counseling and referral pathways; (3) embed leader-led myth correction (e.g., non-transmission via casual contact) into routine community forums and religious gatherings; and (4) formalize cross-sector collaboration (health office–customary institution–religious councils–civil society) to maintain consistent narratives and rapid response to discriminatory incidents. These steps align with evidence that stigma mitigation must occur across touchpoints and that integrated approaches are essential to improve uptake, adherence, and retention, thereby strengthening the impact of biomedical interventions (Nyblade et al., 2020; Kerr et al., 2024; Reif et al., 2021). Future research should test culturally integrated modules using mixed-method evaluation, assess differential effects by gender and key populations, and document scalability to other Bugis-influenced or culturally analogous settings while preserving local meaning and community ownership.

## CONCLUSION

This study demonstrates that local wisdom in Palopo—particularly the Bugis–Luwu cultural values of *sipakatau* (humanizing others), *sipakalebbei* (mutual respect), and *sipakainge* (constructive reminding)—constitutes actionable cultural capital with substantial potential to reduce HIV-related stigma and discrimination against people living with HIV (PLHIV). The findings indicate that stigma in Palopo is sustained by moralized interpretations of HIV, misinformation, and exclusionary social practices; however, these same socio-cultural structures also provide culturally legitimate mechanisms for stigma mitigation. By leveraging *musyawarah adat* as a restorative social forum and the moral authority of customary and religious leaders as trusted communicators, stigma-reduction efforts can be framed in locally resonant narratives that promote dignity, social reintegration, and supportive community norms. This positions cultural integration not as an optional “add-on,” but as a strategic requirement for strengthening HIV health interventions in Palopo.

The study contributes to health intervention scholarship by clarifying how culturally embedded mechanisms can be integrated into HIV programs to improve acceptability, uptake, and sustainability—outcomes that biomedical approaches alone may not fully achieve in settings where stigma disrupts service pathways. Programmatically, integrating local values into health promotion and service delivery can support culturally safe communication, enhance community participation, and strengthen retention in care through reduced fear of disclosure and social exclusion. Nevertheless, implementation will require cross-sector coordination, capacity building for culturally responsive counseling among health workers, and consistent anti-stigma messaging across community and faith-based platforms. Future research should evaluate the effectiveness of culturally grounded stigma-reduction interventions quantitatively and examine differential impacts across gender and key

populations. Overall, this study underscores that culturally tailored, community-led strategies are critical to achieving equitable HIV outcomes and advancing sustainable public health interventions in culturally cohesive contexts such as Palopo.

## ACKNOWLEDGMENT

The authors would like to express their sincere gratitude to all study participants, including people living with HIV (PLHIV), customary and community leaders, religious leaders, health workers, and community cadres in Palopo City, for their openness and valuable insights. Appreciation is also extended to local health authorities and HIV service facilities in Palopo for their support and assistance during data collection, as well as to Universitas Mega Buana Palopo for facilitating the doctoral research process.

## FUNDING

The author(s) reported there is no funding associated with the work featured in this article.

## AUTHORS' INFORMATION

Arlin Adam is a full professor and researcher in public health at the Doctoral Program in Public Health, Universitas Mega Buana Palopo, Palopo, Indonesia. Zainuddin Zainuddin is a senior lecturer in public health affiliated with the Public Health Study Program, Universitas Pejuang Republik Indonesia, Makassar, Indonesia. Irviani Anwar Ibrahim is a senior lecturer and public health researcher at the Department of Public Health, Universitas Islam Negeri Alauddin Makassar, Makassar, Indonesia.

## AUTHORS' CONTRIBUTION

Arlin Adam conceptualized the study, designed the qualitative methodology, conducted field data collection, performed data analysis, and drafted the original manuscript. Zainuddin Zainuddin contributed to the development of the research framework, supported data interpretation, and critically reviewed the manuscript for intellectual content. Irviani Anwar Ibrahim reviewed and refined the manuscript. All authors read and approved the final version of the manuscript.

## COMPETING INTEREST

The author(s) declare no potential conflict of interest with respect to the research, authorship, or publication.

## REFERENCES

- Airhihenbuwa, C. O., & Webster, J. D. (2004). Culture and African contexts of HIV/AIDS prevention, care and support. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 1(1), 4–13. <https://doi.org/10.1080/17290376.2004.9724822>
- Bond, V., Viljoen, L., Stangl, A., Mainga, T., Kavalieratos, Z., Pliakas, T., Hoddinott, G. (2024). The local dynamics of sociostructural features and HIV stigma in the HPTN 071 (PopART) trial: An analysis of community-level data from Zambia and South Africa. *Stigma and Health*, 9(4), 436–449. <https://doi.org/10.1037/sah0000506>
- Celeste-Villalvir, A., Payan, D., Armenta, G., Palar, K., Then-Paulino, A., Acevedo, R., Derose, K. (2023). Exploring gender differences in HIV-related stigma and social support in a low-resource setting: A qualitative study in the Dominican Republic. *PLOS ONE*, 18(8), e0290228. <https://doi.org/10.1371/journal.pone.0290228>
- Ferguson, L., Gruskin, S., Bolshakova, M., Rozelle, M., Yagyu, S., Kasoka, K., Hempel, S. (2023). Systematic review and quantitative and qualitative comparative analysis of interventions to address HIV-related stigma and discrimination. *AIDS*, 37(13), 1919–1939. <https://doi.org/10.1097/QAD.0000000000003628>
- Hedge, B., Devan, K., Catalán, J., Cheshire, A., & Ridge, D. (2021). HIV-related stigma in the UK then and now: To what extent are we on track to eliminate stigma? A qualitative investigation. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-11000-7>
- Kang, B., Chin, L., Camacho-Rivera, M., Garza, M., Espinosa, T., Cong, X., & Ramos, S. (2025). Intervention mapping for systematic development of a community-engaged CVD prevention intervention in ethnic and racial sexual minority men with HIV. *Frontiers in Public Health*, 13. <https://doi.org/10.3389/fpubh.2025.1529152>
- Mendelsohn, J., Fournier, B., Caron-Roy, S., Maina, G., Strudwick, G., Ojok, S., Білаш, О. (2022). Reducing HIV-related stigma among young people attending school in Northern Uganda: Study protocol for a participatory arts-based population health intervention and stepped-wedge cluster-randomized trial. *Trials*, 23(1). <https://doi.org/10.1186/s13063-022-06643-9>
- Kerr, J., Yiğit, İ., Long, D., Paulino-Ramírez, R., Waters, J., Hao, J., & Turan, J. (2024). HIV and intersectional stigma among people living with HIV and healthcare workers and antiretroviral therapy adherence in the Dominican Republic. *International Journal of STD & Aids*, 35(11), 840–849. <https://doi.org/10.1177/09564624241259801>
- Krishnaratne, S., Bond, V., Stangl, A., Pliakas, T., Mathema, H., Lilleston, P., Hargreaves, J. (2020). Stigma and judgment toward people living with HIV and key population groups among three cadres of health workers in South Africa and Zambia: Analysis of data from the HPTN 071 (PopART) trial. *AIDS Patient Care and STDs*, 34(1), 38–50. <https://doi.org/10.1089/apc.2019.0131>
- Mei, S., Zheng, C., Liang, L., Zhang, J., Kiyum, M., Fei, J., Yuan, T., Wang, H., Gao, J., Liu, X., & Du, N. (2025). Revealing the complexity of depression configurations in HIV-positive men who have sex with men: a fuzzy-set qualitative comparative analysis. *BMC Public Health*, 25(1), 1769. <https://doi.org/10.1186/s12889-025-22951-6>
- Mendez-Lopez, A., White, T., Fuster-RuizdeApodaca, M., & Lazarus, J. (2023). Prevalence and sociodemographic determinants of public stigma towards people with HIV and its impact on HIV testing uptake: A cross-sectional study in 64 low- and middle-income countries. *HIV Medicine*, 25(1), 83–94. <https://doi.org/10.1111/hiv.13536>



- Nutor, J., Gyamerah, A., Duah, H., Asakitogum, D., Thompson, R., Alhassan, R., Brown, A. (2024). The association of HIV-related stigma and psychosocial factors and HIV treatment outcomes among people living with HIV in the Volta region of Ghana: A mixed-methods study. *PLOS Global Public Health*, 4(2), e0002994. <https://doi.org/10.1371/journal.pgph.0002994>
- Nyblade, L., Addo, N., Atuahene, K., Alsoufi, N., Gyamera, E., Jacinthe, S., Kraemer, J. (2020). Results from a difference-in-differences evaluation of health facility HIV and key population stigma-reduction interventions in Ghana. *Journal of the International AIDS Society*, 23(4). <https://doi.org/10.1002/jia2.25483>
- Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: a conceptual framework and implications for action. *Social Science & Medicine*, 57(1), 13–24. [https://doi.org/10.1016/S0277-9536\(02\)00304-0](https://doi.org/10.1016/S0277-9536(02)00304-0)
- Reif, S., Wilson, E., McAllaster, C., Pence, B., & Cooper, H. (2021). The relationship between social support and experienced and internalized HIV-related stigma among people living with HIV in the Deep South. *Stigma and Health*, 6(3), 363–369. <https://doi.org/10.1037/sah0000271>
- Sern, T. J., & Zauddin, H. (2014). Affirmative religious response culture to HIV and AIDS: Understanding the public relations role of JAKIM in curbing the epidemic among young muslim couples in Malaysia. *Asian Social Science*, 10(13), 8–16. <https://doi.org/10.5539/ass.v10n13p8>
- Stangl, A., Mwale, M., Seban, M., Mackworth-Young, C., Chiiya, C., Chonta, M., & Bond, V. (2021). Feasibility, Acceptability and Preliminary Efficacy of Tikambisane ('Let's Talk to Each Other'): A Pilot Support Group Intervention for Adolescent Girls Living With HIV in Zambia. *Journal of the International Association of Providers of Aids Care (Jiapac)*, 20. <https://doi.org/10.1177/23259582211024772>
- Trickett, E. J. (2002). Context, Culture, and Collaboration in AIDS Interventions: Ecological Ideas for Enhancing Community Impact. *Journal of Primary Prevention*, 23(2), 157–174. <https://doi.org/10.1023/A:1019964215050>