

Cultural Transformation and HIV Stigma among Adolescents: Exploring the Role of Social Support in a Multilevel Context (A Systematic Review)

Bidasari Jamil , Ari Yuniastuti

Universitas Mega Buana, Indonesia

Email: bidasarijamil@gmail.com, ari_yuniastuti@yahoo.co.id

Abstract

HIV-related stigma remains a critical barrier to treatment, adherence and quality of life among adolescents living with HIV, yet its relationship with cultural transformation and social support systems remains underexplored in the existing literature. This study aims to examine the relationship between cultural transformation and HIV stigma among adolescents living with HIV through a systematic review of recent international literature. The focus includes the various forms of stigma experienced by adolescents, the role of social support from family, peers, and schools, and the effectiveness of multilevel interventions in mitigating the impact of stigma on adolescent well-being. Literature searches were conducted in the Scopus database using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach, with inclusion criteria covering English-language publications from 2019 to 2025. A total of 40 articles met the eligibility criteria and were analyzed using a narrative-thematic approach. The synthesis reveals that cultural transformation influences a shift in stigma from overt to internalized forms, with shame and social withdrawal emerging as dominant expressions. Social support plays a crucial role in reducing internalized stigma and improving adherence to antiretroviral therapy. Meanwhile, multilevel interventions integrating psychosocial therapy, peer support, and inclusive school policies are identified as the most effective strategies for enhancing adolescent well-being. The study concludes that efforts to reduce HIV stigma among adolescents living with HIV must consider dynamic cultural contexts and involve cross-level support from families, schools, and communities.

Keywords: cultural transformation, HIV stigma, adolescents, social support, multilevel interventions, systematic review

INTRODUCTION

Adolescents living with HIV face complex dual challenges that extend beyond medical conditions to encompass social and cultural pressures affecting their overall quality of life. One of the most fundamental issues is the persistent social stigma attached to the identity of individuals living with HIV, particularly during adolescence, which is a critical phase of development characterized by the pursuit of independence and identity formation. This stigma often manifests in various forms, ranging from overt discrimination to internalized feelings of shame and fear, both of which significantly contribute to decreased treatment adherence and reduced engagement with healthcare services (Pantelic et al., 2020; Robinson et al., 2023).

Globally, approximately 1.7 million adolescents aged 10-19 years are living with HIV, with the majority residing in sub-Saharan Africa where stigma remains particularly entrenched in sociocultural structures. The consequences of stigma extend beyond individual suffering; they directly undermine global efforts to achieve the UNAIDS 95-95-95 targets, as stigmatized adolescents are less likely to test, disclose their status, or maintain consistent treatment adherence.

In the socio-cultural context, stigma does not emerge spontaneously but is shaped by the transformation of cultural values and shifts in social structures that influence how societies interpret illness, morality, and identity. Cultural transformation—understood as the dynamic process through which societies modify their values, norms, and practices in response to modernization, globalization, and information flows—plays a pivotal role in reshaping stigma manifestations. In many regions, including local communities in Indonesia, HIV is still frequently associated with behaviors deemed deviant, creating social distance between adolescents living with HIV and their surrounding environment. This phenomenon illustrates how cultural transformation, which is driven by modernization, information flows, and evolving social norms, can generate new, subtler forms of stigma that remain deeply hurtful and exclusionary.

Previous studies have shown that stigma among adolescents living with HIV can be categorized into three main forms: enacted stigma, anticipated (or perceived) stigma, and internalized stigma (Pantelic et al., 2020). These three forms are interrelated and collectively influence adolescents' decisions to undergo testing, disclose their HIV status, adhere to antiretroviral therapy (ART), and ultimately achieve viral suppression. Discrimination within healthcare settings and social environments often fosters feelings of shame and worthlessness, which in turn lead to withdrawal from services and decreased treatment retention (Robinson et al., 2023).

In addition to social factors, mental health has been identified as the most consistent mediator between stigma and treatment outcomes among adolescents living with HIV. Internalized stigma is associated with higher levels of depression, helplessness, loneliness, symptoms of post-traumatic stress disorder (PTSD), and diminished self-esteem (Nabunya et al., 2023a). Indeed, the psychological effects of shame and stigma are often more profound than those of economic or medical factors. In Southeast Asia, adolescents with perinatally acquired HIV living in impoverished households are twice as likely to experience depressive symptoms compared to their peers who are not exposed to stigma (Aurpibul et al., 2021). Meta-analytic evidence from sub-Saharan Africa indicates that internalized stigma prevalence ranges from 25% to 65% among adolescents living with HIV, with significant variations across urban and rural settings. These findings indicate that stigma is not merely a social issue but also a serious mental health concern.

Social environments such as schools, peer groups, and families play a crucial role in either reinforcing or mitigating the effects of stigma. Fear of HIV status disclosure within school settings often leads many adolescents to hide their medication, delay taking their doses, or even avoid clinic visits altogether (Madiba & Josiah, 2019). Bullying, social exclusion, and negative stereotyping exacerbate psychological distress and weaken adolescents' motivation to remain adherent to treatment. Conversely, strong social support from families, friends, and communities serves as an effective protective factor against depression and risky behaviors (Casale et al., 2019). Peer-support initiatives such as Kids Clubs have even been shown to improve adherence to ART and facilitate viral suppression (Settergren et al., 2021). The

buffering effect of social support operates through multiple mechanisms: it enhances self-esteem, provides practical assistance with medication management, reduces feelings of isolation, and creates safe spaces for disclosure and emotional expression.

In cultural contexts, local norms and social values play a significant role in shaping how stigma is perceived and managed. In some communities, HIV is viewed as a moral consequence, whereas in particularly those undergoing modernization, there has been a perceptual shift toward understanding HIV as a medically manageable chronic condition. However, the tension between traditional values and modern health information often creates contradictions in the social acceptance of adolescents living with HIV. For instance, in informal settlements in Kenya, some adolescent girls report being more afraid of being discovered as pregnant than as HIV-positive, as pregnancy is considered more socially acceptable (Miller et al., 2021). These findings illustrate the complex dynamics of cultural transformation in shaping perceptions of stigma.

Intersectionality defines as the overlap of social identities such as gender, social class, and sexual orientation, which adds new layers of vulnerability. Studies in the southern United States indicate that minority adolescents face compounded stigma shaped by religious norms and the moral values of their communities (Elopre et al., 2021). Meanwhile, in parts of Africa, women and rural populations experience a heavier stigma burden due to limited access to healthcare and socio-economic disparities (Tadesse et al., 2024). Therefore, intervention strategies must simultaneously account for cultural, gender, and structural factors.

In this context, cultural transformation becomes a critical aspect to understand, as it influences the trajectory of societal perceptions and behaviors toward HIV. Shifts in social norms toward greater openness to health education, acceptance of ART, and normalization of HIV status disclosure can serve as starting points for reducing stigma among adolescents. Conversely, cultural change that is not accompanied by education and empowerment may instead generate new, more subtle forms of stigma that are equally detrimental (Mason et al., 2022).

The rationale for this study lies in the fact that stigma toward adolescents living with HIV remains a major barrier to achieving the global 95–95–95 targets, which is ensuring that 95% of people living with HIV know their status, 95% receive treatment, and 95% achieve viral suppression (Jalloh et al., 2025). In many developing countries, including Indonesia, these targets have yet to be fully realized due to persistent social stigma, insufficient psychosocial support, and a lack of youth-friendly health services. Understanding the relationship between cultural transformation and social stigma therefore represents a strategic step in designing more effective and contextually grounded interventions.

Furthermore, the significance of this study also stems from the scarcity of literature linking local cultural change with the dynamics of stigma among adolescents living with HIV. Most existing research continues to focus primarily on medical aspects and ART adherence, while the cultural and socio-psychological dimensions remain underexplored. As highlighted by Embleton et al. (2023), stigma operates as a cross-level factor that disrupts the continuum of prevention and care, hence, examining its cultural roots is crucial for improving health outcomes among adolescents.

This systematic review also seeks to address the existing research gap by integrating cross-national findings that highlight the roles of cultural, social, and psychological factors in shaping and addressing HIV-related stigma among adolescents. By synthesizing evidence from diverse contexts, this study aims to provide a comprehensive understanding of how stigma is

formed, managed, and reduced through culturally grounded and socially supportive approaches.

Based on the reviewed literature, this study focuses on three main research questions are (1) How does cultural transformation influence the emergence and expression of HIV-related stigma among adolescents, particularly in relation to self-disclosure and treatment adherence? (2) What roles do family, peer, and school support play in mitigating internalized and anticipated stigma among adolescents living with HIV? (3) Which models of intervention and psychosocial approaches have been proven effective in reducing HIV-related stigma and improving adolescent mental health outcomes? Accordingly, the objectives of this study are to: (1) Identify the patterns of relationship between cultural transformation and the emergence of social stigma toward adolescents living with HIV, (2) Analyze the forms of social support that contribute to reducing the psychological impact of stigma and improving treatment adherence, and (3) Map out effective interventions for stigma reduction based on cross-national empirical evidence.

By understanding the interconnections between culture, stigma, and the psychosocial dynamics of adolescents, the findings of this study are expected to provide both theoretical and practical foundations for developing more contextual and human-centered intervention programs. This multilayered approach involves the engagement of families, schools, communities, and public policy, which are anticipated to serve as key components in fostering a supportive social environment for adolescents living with HIV. The results of this review may serve as an important reference for local policy formulation, which particularly in the context of Palopo City, so that HIV prevention and management strategies not only focus on medical aspects but also address the accompanying cultural and social transformations.

RESEARCH METHOD

This study employed a Systematic Literature Review (SLR) design, guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework (Embleton et al., 2023). This approach aims to identify, evaluate, and synthesize previous research findings relevant to the themes of cultural transformation and social stigma among adolescents living with HIV. The SLR method was chosen to provide a comprehensive and holistic understanding of the forms, factors, and impacts of stigma, as well as the sociocultural contexts that shape it (Pantelic et al., 2020; Robinson et al., 2023).

This research process consisted of four main stages: (1) Identification of relevant literature, (2) Screening of records, (3) Eligibility assessment, and (4) Final inclusion of studies, as illustrated in the PRISMA flow diagram.

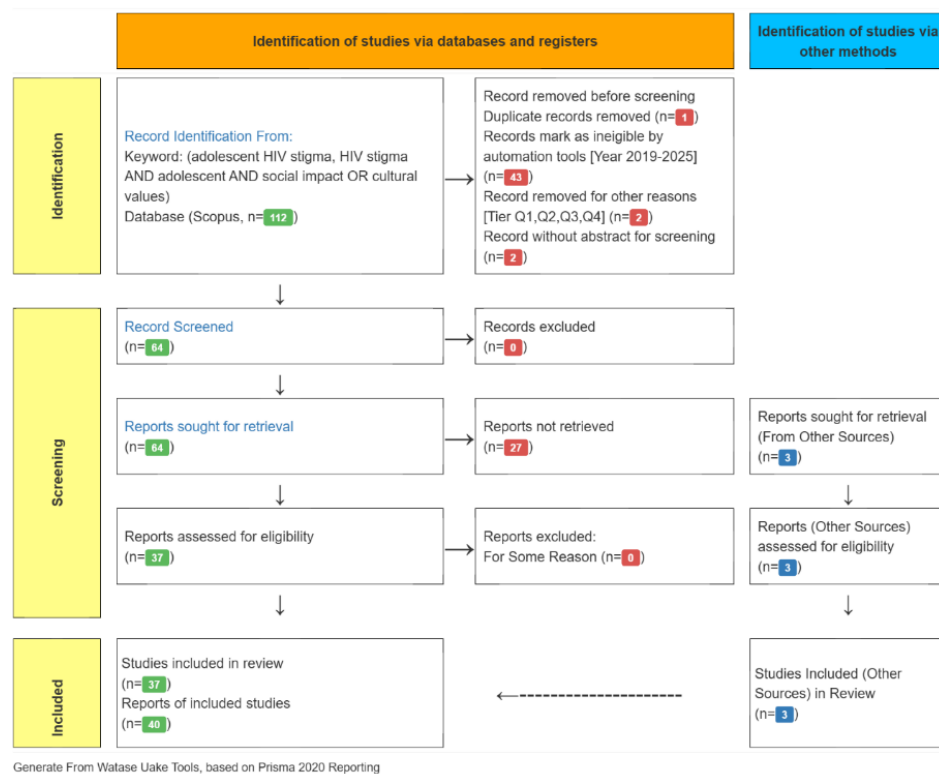


Figure 1. Three Phases of the Bibliometric Research Methodology According to the PRISMA Flow Diagram

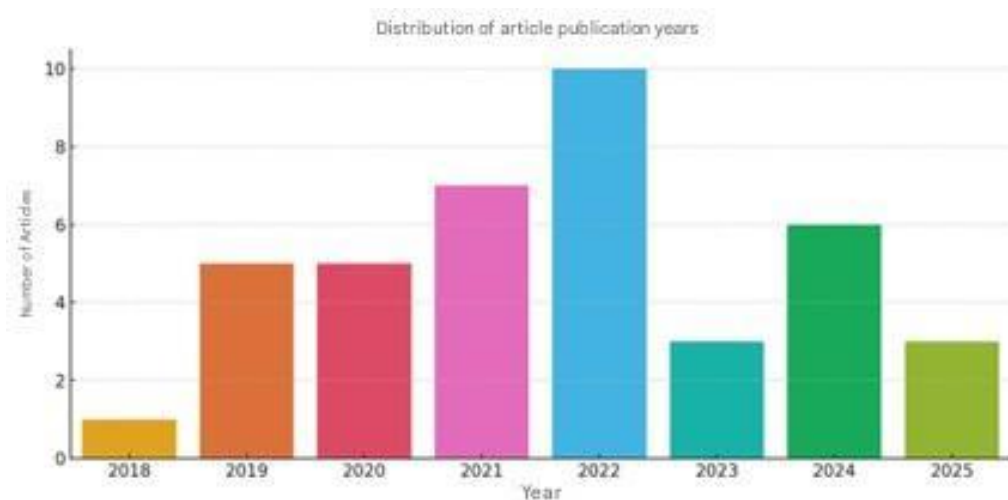


Diagram 1. Distribution Diagram of Article Publication Years

The primary data source was the Scopus database, using the following search keywords: (adolescent HIV stigma) OR (HIV stigma AND adolescent) AND (social impact OR cultural values). The publication range included in this review spans 2019–2025, aligning with the period most relevant to recent developments in adolescent HIV services and socio-cultural dynamics (Tadesse et al., 2024; Jalloh et al., 2025).

A total of 112 articles were initially identified through the database search. Duplicate records were removed, 43 articles were excluded for not meeting the inclusion criteria (e.g., outside the publication range), and 2 articles were eliminated due to the absence of an

accessible abstract. After this process, 64 articles proceeded to the screening stage, during which titles and abstracts were reviewed (Aurpibul et al., 2021). No articles were excluded at this stage; however, 27 reports were inaccessible in full text. Consequently, 37 reports met the criteria for the eligibility assessment. Additionally, 3 supplementary articles were identified from secondary sources (via cross-citation and other databases) and assessed for eligibility, resulting in a final total of 40 articles included in the comprehensive analysis.

The inclusion criteria were as follows: (1) Articles focusing on adolescents living with HIV, aged 10–24 years. (2) Studies addressing HIV-related stigma in at least one of its three primary forms: enacted, anticipated, or internalized (Pantelic et al., 2020), (3) Research that discusses social, cultural, or community value dimensions influencing the experience of stigma (Mason et al., 2022), (4) Empirical studies (quantitative, qualitative, or mixed methods) published in peer-reviewed journals.

The exclusion criteria were as follows: (1) Opinion papers, editorials, or policy commentaries lacking empirical data, (2) Studies involving non-adolescent populations or focusing primarily on general adult groups, (3) Articles not available in English or lacking a verifiable abstract.

The primary instrument used in this study was a systematic data extraction sheet, designed in accordance with the PRISMA parameters (Wanjala et al., 2021). This sheet included key information such as: the author's name, year of publication, country of study, research design, type of stigma examined, sociocultural context, and main findings. In addition, details regarding the measurement instruments employed in each study to assess stigma and mental health were also extracted—for instance, the Berger HIV Stigma Scale, PHQ-9 (Patient Health Questionnaire-9), and GAD-7 (Generalized Anxiety Disorder-7) (Wanjala et al., 2021; Adjorlolo & Boakye, 2025).

The data collection procedure was carried out systematically through the following stages: (1) Initial identification using predefined keywords in the Scopus database, (2) Screening based on titles and abstracts to exclude irrelevant articles, (3) Eligibility assessment through full-text reading to ensure alignment with the study's focus, (4) Data extraction using a structured worksheet designed for consistency and completeness and (5) Thematic synthesis to categorize research findings according to the three main research questions.

This process was conducted independently and iteratively to ensure the reliability and consistency of the extracted data.

The data were analyzed using a narrative thematic approach, consistent with the qualitative synthesis standards applied in systematic literature reviews (SLR) (Embleton et al., 2023). The analysis focused on three main themes aligned with the study's research questions: (1) Cultural transformation and the forms of stigma experienced by adolescents living with HIV, (2) Social and psychological impacts of stigma on adolescent behavior and mental health, and (3) Effective multilevel intervention strategies aimed at reducing stigma and strengthening engagement with healthcare services.

The synthesis was carried out by comparing patterns of findings across studies, taking into account socio-cultural contexts, and tracing cross-thematic relationships (Pantelic et al., 2020; Nabunya & Namuwonge, 2023). This process resulted in a mapping that illustrates how cultural, social, and psychological factors interact in shaping the stigma experiences of adolescents living with HIV.

RESULTS AND DISCUSSION

Result

RQ1: How do the forms and dynamics of cultural transformation influence social stigma among adolescents living with HIV?

From the analysis of 40 reviewed articles, it was found that stigma among adolescents living with HIV manifests in three main forms, thus are enacted, anticipated, and internalized stigma, which are interrelated and collectively influence adolescents' health behaviors (Pantelic et al., 2020). Within the context of cultural transformation, evolving community values and social norms play a crucial role in shaping how adolescents understand and respond to their HIV status (Mason et al., 2022).

Several studies indicate that shifts in modern cultural values have influenced societal attitudes toward HIV. In urban areas, emerging norms that are more open toward reproductive health have contributed to a reduction in overt stigma; however, strong forms of internalized stigma still persist (Rich et al., 2022). Conversely, in rural or traditional communities, moral and purity norms reinforce perceptions of HIV as a consequence of deviant behavior, leading adolescents to conceal their status and avoid health services (Tadesse et al., 2024).

In some contexts, cultural transformation does not occur uniformly. For example, in informal settlements in Kenya, some adolescent girls report being more concerned about pregnancy than HIV, as pregnancy is perceived as more shameful within local norms (Miller et al., 2021). Similar patterns have been observed among pregnant adolescents with HIV, who experience double stigma, both for premarital pregnancy and for their HIV status, which is further deepening their social isolation (Kabunga et al., 2024).

Moreover, changes in social interaction patterns resulting from modernization have also affected how stigma takes form. Studies from the southern United States reveal that intersectionality, which is the overlap of race, sexual orientation, and religious values shapes adolescents' self-acceptance and social experiences (Elopre et al., 2021). In African contexts, stigma burdens tend to be higher among women and rural populations due to disparities in access to healthcare and education (Tadesse et al., 2024).

Overall, these findings indicate that cultural transformation generates shifts in the forms and expressions of stigma, yet does not necessarily eliminate it. Emerging values in modern societies may create spaces for more open discussions about HIV; however, they simultaneously preserve underlying moral biases that compel adolescents to bear stigma in more subtle and internalized forms (Mason et al., 2022; Pantelic et al., 2020).

RQ2: How does stigma affect the mental health and behavioral outcomes of adolescents living with HIV?

Most studies highlight a strong association between stigma and adolescents' mental health, with feelings of shame, loneliness, and low self-esteem emerging as the most common psychological consequences. Internalized stigma has been shown to correlate with higher levels of depression, increased PTSD symptoms, and pervasive feelings of worthlessness among adolescents (Nabunya & Namuwonge, 2023).

Longitudinal data from South Africa reveal that bullying and discrimination in social environments can heighten internalized stigma, which subsequently triggers psychological symptoms such as anxiety and social withdrawal (Boyes et al., 2020). Anticipated stigma also

contributes to the avoidance of healthcare services, as adolescents often fear that their HIV status will be disclosed to others (Madiba & Josiah, 2019).

From a social perspective, social support functions as a crucial protective buffer. Casale et al. (2019) found that multi-layered support from family, peers, and the community significantly reduces suicidal ideation and strengthens adherence to treatment. Peer-support programs such as Kids Clubs have also been proven to enhance ART adherence and viral suppression among adolescents (Settergren et al., 2021).

Furthermore, the school and family environments play central roles in shaping adolescents' health behaviors. Fear of disclosure in school settings often leads adolescents to hide medication or delay taking doses (Madiba & Josiah, 2019). Experiences of bullying, mockery, and social exclusion within educational settings exacerbate psychological distress, whereas open communication with teachers and peers fosters a safer environment that enhances comfort with disclosure and improves overall well-being (Nabunya et al., 2020).

At the clinical level, Osayi et al. (2024) found that negative self-image and the personalization of stigma are associated with virological failure among adolescents in Nigeria, indicating that stigma is not only a psychological burden but also affects clinical outcomes and treatment engagement.

Mental health emerges as the most consistent mediating pathway between stigma and treatment outcomes. Internalized stigma reduces adolescents' sense of self-control and fosters hopelessness, while social support-based interventions have been shown to strengthen future orientation and treatment motivation (Yuan et al., 2024).

Thus, the reviewed literature demonstrates that stigma influences the entire spectrum of adolescent well-being, which are emotional, behavioral, and clinical. Shame, social withdrawal, and fear of disclosure function as key mechanisms that undermine treatment adherence and engagement with healthcare services.

RQ3: What strategies are effective in reducing stigma and improving service engagement among adolescents living with HIV?

The review identified a range of multilevel strategies targeting the individual, family, school, healthcare, and community levels (Embleton et al., 2023). The most frequently implemented approaches include peer support programs, cognitive-behavioral therapy (CBT)-based counseling, and community-based interventions designed to shift social attitudes and norms surrounding HIV (Watt et al., 2019; Nabunya et al., 2020).

Table 1. Summary of Effective Multilevel Interventions for HIV Stigma Reduction Among Adolescents

Intervention Level	Strategy Type	Key Components	Evidence of Effectiveness
Individual	Brief CBT-based counseling	Cognitive restructuring, coping skills, stigma reframing	Reduced stigmatizing attitudes, enhanced ART readiness
Individual/Peer	Peer support programs (Kids Clubs)	Group sessions, shared experiences, mentorship	Improved ART adherence, viral suppression
Family	Caregiver emotional support training	Communication skills, empathy building, disclosure support	Reduced internalized stigma, strengthened family cohesion

Intervention Level	Strategy Type	Key Components	Evidence of Effectiveness
School	Anti-bullying policies & private medication spaces	Confidentiality protocols, gradual disclosure pathways	Increased treatment adherence, reduced status exposure risk
Community	Culturally grounded social norm interventions	Religious leader engagement, community dialogues	Challenged stereotypes, created safe service access spaces
Healthcare System	Provider training programs	Misconception correction, discrimination reduction	Improved adolescent-friendly service environments
Structural	Socio-economic disparity policies	Equitable access initiatives, regional support programs	Enhanced service reach to marginalized populations

At the individual level, psychosocial interventions such as brief CBT-based counseling delivered through antenatal or adolescent health services have proven effective in reducing stigmatizing attitudes and enhancing readiness to initiate ART (Watt et al., 2019). Peer-support initiatives, particularly community-based programs like Kids Clubs, have been shown to strengthen ART adherence and improve viral suppression among adolescents (Settergren et al., 2021).

Emotional support from caregivers plays a crucial role at the family level. Nabunya et al. (2023b) found that stigma by association can exacerbate parenting stress and weaken the overall support provided to adolescents. Moreover, family structure and the gender of the caregiver influence the degree of internalized stigma among adolescents, underscoring the need for interventions that strengthen family cohesion and promote empathic communication within the household (Wowolo et al., 2022).

The school environment serves as a critical setting for intervention strategies. Policies such as anti-bullying regulations, private medication spaces, and gradual disclosure pathways have been found effective in reducing the risk of status exposure and increasing adolescents' comfort in maintaining treatment adherence (Madiba & Josiah, 2019; Nabunya et al., 2020).

At the community level, culturally and religiously grounded approaches are employed to challenge stereotypes and create safe spaces for adolescents to access health services (Ashaba et al., 2019). Logie et al. (2024) emphasize the importance of the prevention cascade framework in identifying service gaps among refugee adolescents who face geographical and language barriers.

Interventions also extend to healthcare providers, involving training programs aimed at correcting clinical misconceptions and reducing discriminatory behavior (Fauk et al., 2021). On a systemic level, policies addressing regional and socio-economic disparities are essential to ensure more equitable access to HIV services (Melkam & Fente, 2024).

Overall, the review highlights that the most effective strategies are multilayered and intersectional approaches that integrate mental health support, privacy and confidentiality policies, family empowerment, and social norm transformation (Elopre et al., 2021; Mutumba et al., 2022). The implementation of these comprehensive strategies has been shown to strengthen adolescents' engagement with HIV care services and contribute significantly to achieving the 95–95–95 global targets among adolescents (Jalloh et al., 2025).

Discussions

RQ1 — The Influence of Cultural Transformation on the Formation and Emergence of HIV Stigma among Adolescents

Findings from the systematic literature review (SLR) indicate that cultural transformation has a complex influence on the emergence and forms of HIV-related stigma among adolescents. Shifts in social values resulting from globalization, urbanization, and the penetration of digital media have created new patterns in how societies perceive infectious diseases such as HIV. In traditional contexts, stigma often originates from moral values that associate HIV with immoral behavior, causing infected individuals to be perceived as sources of shame for their families and communities. However, in societies undergoing cultural transformation, such stigma does not disappear but rather evolves into more subtle forms, which is manifested through covert social exclusion or internalized shame among adolescents living with HIV (Pantelic et al., 2020).

The review reveals that cultural change often generates value ambiguity: on one hand, there is growing acceptance of health awareness and open information exchange; on the other, traditional moral norms continue to influence community responses to HIV. In some cases, modernization even widens the social gap between adolescents living with HIV and their peers, as new pressures to "appear normal" on social media or in school environments emerge (Tadesse et al., 2024). This situation often compels adolescents to conceal their HIV status, thereby reducing both disclosure rates and adherence to antiretroviral therapy (ART) (Madiba & Josiah, 2019).

These findings reinforce the notion that culture is not a passive background, but a dynamic element that actively shapes how stigma is constructed and sustained. As emphasized by Embleton et al. (2023), transformations in social values and systems can shift the relationships among stigma, social support, and health outcomes. In the adolescent context, cultural transformation influences both identity formation and social interaction, which in turn determine the extent to which stigma affects mental well-being and treatment behaviors. The significance of these findings lies in the recognition that understanding cultural values and symbols is essential for developing HIV prevention and education efforts that are not only informative but also socially relevant to adolescents lived realities. Thus, this study underscores that cultural transformation must be treated as a key contextual factor in understanding and addressing HIV stigma among adolescents.

RQ2 — The Role of Family, Peer, and School Support in Reducing Stigma

The synthesis of the reviewed literature demonstrates that social support from family, peers, and the school environment plays a central role in reducing stigma experienced by adolescents living with HIV. Family support functions as a vital source of emotional security, particularly in helping adolescents cope with internalized stigma. Nabunya and Namuwonge (2023) found that open communication and accepting family attitudes increase adolescents' comfort in disclosing their HIV status while reducing feelings of shame and social isolation. Family support also positively influences ART adherence, as it provides both supervision and motivation for consistent medication use (Nabunya et al., 2020).

On the other hand, peer support emerges as an equally important protective factor. Programs such as Teen Clubs or adolescent support groups have been shown to reduce depression and enhance adherence to ART (Settergren et al., 2021). Peers who share similar

experiences help normalize the HIV condition, alleviate shame, and foster a sense of belonging and acceptance within social circles (Casale et al., 2019). The school environment likewise plays a crucial role in mitigating stigma. Schools that enforce privacy policies related to medication, provide HIV-sensitive education, and train teachers to avoid discriminatory behavior can create more inclusive and supportive environments for adolescents (Madiba & Josiah, 2019; Kip et al., 2022).

These findings indicate that stigma does not arise solely from internal individual factors but is also shaped by social interactions within families, communities, and educational institutions. Therefore, stigma-reduction efforts must target adolescents' broader social systems, rather than focusing exclusively on individual-level interventions. The significance of these findings lies in their direct implications for adolescents' mental health and treatment behaviors: as social support increases, anxiety and depression decrease, and engagement with healthcare services improves (Nabunya & Namuwonge, 2023). Accordingly, this review contributes by consolidating cross-study evidence that establishes social support as a mediating factor between stigma and health outcomes, while highlighting the potential for developing community-based interventions that actively involve families and schools.

RQ3 — Models of Intervention and Psychosocial Approaches to Reduce Stigma

These findings indicate that stigma does not arise solely from internal individual factors but is also shaped by social interactions within families, communities, and educational institutions. Therefore, stigma-reduction efforts must target adolescents' broader social systems, rather than focusing exclusively on individual-level interventions. The significance of these findings lies in their direct implications for adolescents' mental health and treatment behaviors: as social support increases, anxiety and depression decrease, and engagement with healthcare services improves (Nabunya & Namuwonge, 2023). Accordingly, this review contributes by consolidating cross-study evidence that establishes social support as a mediating factor between stigma and health outcomes, while highlighting the potential for developing community-based interventions that actively involve families and schools.

Interventions that include healthcare worker training to reduce discriminatory behaviors have also proven effective in creating adolescent-friendly service environments (Settergren et al., 2021). Furthermore, efforts to strengthen school policies, which particularly those ensuring the confidentiality of HIV status and providing emotional support for students help to alleviate fear related to self-disclosure (Madiba & Josiah, 2019). Overall, these findings emphasize the importance of an integrated approach that combines cognitive strategies, social support, and institutional policies to address stigma comprehensively.

The significance of these findings lies in the recognition that no single intervention is sufficient to overcome HIV-related stigma among adolescents. Instead, a combination of approaches addressing the multiple layers of adolescents' lives is required to achieve sustainable impact. This study contributes to the field by reinforcing the multilevel intervention framework, which extends beyond individual psychological aspects to encompass the social and cultural determinants that influence adolescent health behaviors. The results also support the direction of implementation-oriented research that can adapt community-based adolescent intervention packages to specific local socio-cultural contexts.

Implications and Research Contributions

This study carries several important practical implications. First, its findings provide a strong foundation for intervention program designers to develop holistic and culturally sensitive approaches for adolescents. Effective interventions should not merely aim to increase HIV knowledge but must also build adolescents' social and emotional capacities through the involvement of family support, peer engagement, and inclusive school policies. Second, the study offers direction for policy-makers to incorporate stigma and mental health indicators into national HIV program targets, ensuring that program evaluation extends beyond infection and treatment statistics to include the social well-being of adolescents living with HIV. Third, from an academic standpoint, this research expands the understanding of cultural transformation as a contextual factor that shapes stigma formation, while highlighting the need for adaptive stigma theories that reflect adolescents' evolving social and cultural realities.

The main contribution of this study to the scientific field lies in its ability to connect three critical dimensions, which are culture, stigma, and social intervention within a single analytical framework. By synthesizing empirical evidence from diverse studies, it reinforces the notion that stigma reduction efforts must be multilevel and context-specific. Furthermore, the findings provide a foundation for future applied research aimed at testing the effectiveness of multilevel intervention models in local contexts such as Palopo City, where distinctive cultural characteristics may shape the experience and management of stigma.

Research Limitations

Although this study provides significant contributions, several limitations must be acknowledged. First, the synthesis is based on 40 studies identified from the Scopus database within the 2019–2025 publication range; therefore, the findings represent only the literature available during that period. Second, variations in social contexts and healthcare systems across countries may affect the generalizability of the results, as the dynamics of stigma in Southeast Asian societies do not always align with those observed in African or European contexts. Third, as this research relies on secondary data, the quality and depth of analysis depend on the methodologies and validity of instruments used in previous studies. Differences in stigma measurement tools (e.g., Berger Stigma Scale or HIV Stigma Scale–Short Version) may lead to variability in outcomes. Fourth, language and publication access limitations may have led to the omission of relevant local literature, particularly studies published in non-English sources or outside indexed journals.

Despite these limitations, the study's findings remain valuable and provide a solid foundation for future research. Subsequent studies are recommended to conduct field explorations in specific cultural contexts, such as Palopo City, to validate the relationships among cultural transformation, stigma, and treatment adherence. Furthermore, implementation trials of the identified multilevel intervention packages are needed to ensure their effective adaptation in primary healthcare and school-based settings.

Discussion Conclusion

Overall, this study demonstrates that HIV-related stigma among adolescents cannot be separated from the cultural contexts that shape it. Cultural transformation influences both the form and direction of stigma, while social support from families, peers, and schools plays a crucial role in mitigating its negative effects on adolescent well-being. Multilevel, culturally sensitive, and socially grounded intervention approaches are essential in fostering a more inclusive and supportive environment for adolescents living with HIV. This study contributes

to both theory and practice by emphasizing that effective stigma reduction efforts must account for cultural dynamics and involve the entire social ecosystem of adolescents in an integrated and collaborative manner.

CONCLUSION

The findings of this systematic review reveal that HIV-related stigma among adolescents is a multidimensional phenomenon shaped by the interaction of cultural, social, and psychological factors. Cultural transformation has led to a shift in the manifestation of stigma from overt and moralistic forms to more subtle and internalized expressions such as shame and social withdrawal. Changes in values and social norms place adolescents at a crossroads between self-acceptance and social pressure, making social support increasingly vital. The results further affirm that families, peers, and schools play crucial mediating roles in reducing the negative effects of stigma on adolescent well-being. Emotional support, open communication, and inclusive school policies have been proven to decrease internalized stigma and enhance adherence to antiretroviral therapy (ART). Multilevel approaches that integrate psychosocial interventions including cognitive behavioral therapy (CBT), peer support, and economic empowerment programs emerge as the most effective strategies for reducing stigma and improving health outcomes among adolescents living with HIV. The main contribution of this study lies in its ability to synthesize three critical dimensions, which are cultural transformation, social stigma, and multilevel intervention within a single systematic analytical framework. Through a narrative–thematic approach, this research enriches academic understanding of how sociocultural change influences stigma patterns and how social support functions as a protective mechanism. Moreover, it reinforces the development of community-based intervention models and stigma theories that are more culturally sensitive and relevant to adolescent populations. Future research should conduct context-specific field studies, particularly in areas such as Palopo City, to test the validity of the relationship between cultural transformation and stigma. It is also recommended to implement and evaluate multilevel intervention packages identified in this review so that the synthesized evidence can be translated into practical policies that support the psychosocial well-being of adolescents living with HIV.

REFERENCES

- Adjorlolo, Samuel, and Dorothy Serwaa Boakye, ‘Factorial Structure of the Patient Health Questionnaire-9, Generalized Anxiety Disorder-7 and Berger HIV Stigma Scale-Short Form among Adolescents Living with HIV in Ghana’, *Plos One*, 20 (2025), 1–13 <<https://doi.org/10.1371/journal.pone.0326169>>
- Ashaba, Scholastic, Christine E. Cooper-Vince, Dagmar Vořechovská, Godfrey Zari Rukundo, Samuel Maling, Dickens Akena, and others, ‘Community Beliefs, HIV Stigma, and Depression among Adolescents Living with HIV in Rural Uganda’, *African Journal of AIDS Research*, 18 (2019), 169–80 <<https://doi.org/10.2989/16085906.2019.1637912>>
- Aurpibul, Linda, Jiratchaya Sophonphan, Kathleen Malee, Stephen J. Kerr, Ly Penh Sun, Pradthana Ounchanum, and others, ‘HIV-Related Enacted Stigma and Increase Frequency of Depressive Symptoms among Thai and Cambodian Adolescents and Young Adults with Perinatal HIV’, *International Journal of STD and AIDS*, 32 (2021), 246–56 <<https://doi.org/10.1177/0956462420960602>>
- Boyes, Mark E., Marija Pantelic, Marisa Casale, Elona Toska, Elizabeth Newnham, and Lucie

- D. Cluver, 'Prospective Associations between Bullying Victimization, Internalised Stigma, and Mental Health in South African Adolescents Living with HIV', *Journal of Affective Disorders*, 276 (2020), 418–23 <<https://doi.org/10.1016/j.jad.2020.07.101>>
- Casale, Marisa, Mark Boyes, Marija Pantelic, Elona Toska, and Lucie Cluver, 'Suicidal Thoughts and Behaviour among South African Adolescents Living with HIV: Can Social Support Buffer the Impact of Stigma?', *Journal of Affective Disorders*, 245 (2019), 82–90 <<https://doi.org/10.1016/j.jad.2018.10.102>>
- Elopre, Latesha, Sophia A. Hussen, Corilyn Ott, Michael J. Mugavero, and Janet M. Turan, 'A Qualitative Study: The Journey to Self-Acceptance of Sexual Identity among Young, Black MSM in the South', *Behavioral Medicine*, 47 (2021), 324–34 <<https://doi.org/10.1080/08964289.2020.1870428>>
- Embleton, Lonnie, Carmen H. Logie, Kenneth Ngunjiri, La Ron Nelson, Liza Kimbo, David Ayuku, and others, 'Intersectional Stigma and Implementation of HIV Prevention and Treatment Services for Adolescents Living with and at Risk for HIV: Opportunities for Improvement in the HIV Continuum in Sub-Saharan Africa', *AIDS and Behavior*, 27 (2023), 162–84 <<https://doi.org/10.1007/s10461-022-03793-4>>
- Fauk, Nelsensius Klau, Paul Russell Ward, Karen Hawke, and Lillian Mwanri, 'HIV Stigma and Discrimination: Perspectives and Personal Experiences of Healthcare Providers in Yogyakarta and Belu, Indonesia', *Frontiers in Medicine*, 8 (2021), 1–11 <<https://doi.org/10.3389/fmed.2021.625787>>
- Jalloh, Mohamed F., Alexander Kailembo, Nicolas Schaad, Sophia A. Nur, Prosper Njau, Haruka Maruyama, and others, 'Utility of Population-Based HIV Impact Assessments to Understand the Associations of Stigma with the HIV Treatment Cascade: Analytical Framework Using Cross-Sectional Evidence from Tanzania', *PLoS ONE*, 20 (2025), 1–15 <<https://doi.org/10.1371/journal.pone.0323916>>
- Kabunga, Amir, Caroline Kambugu Nabasiye, Eustes Kigingo, Halimah Namata, Enos Mwiroti Shikanga, Samson Udho, and others, 'HIV-Related Stigma Among Pregnant Adolescents: A Qualitative Study of Patient Perspectives in Southwestern Uganda', *HIV/AIDS - Research and Palliative Care*, 16 (2024), 217–27 <<https://doi.org/10.2147/HIV.S463506>>
- Kip, Esther C., Michael Udedi, Kazione Kulisewa, Vivian F. Go, and Bradley N. Gaynes, 'Stigma and Mental Health Challenges among Adolescents Living with HIV in Selected Adolescent-Specific Antiretroviral Therapy Clinics in Zomba District, Malawi', *BMC Pediatrics*, 22 (2022), 1–12 <<https://doi.org/10.1186/s12887-022-03292-4>>
- Logie, Carmen Helen, Moses Okumu, Miranda Loutet, Madelaine Coelho, Alyssa McAlpine, Frannie MacKenzie, and others, 'Contextualizing HIV Testing Experiences within the HIV Prevention Cascade: Qualitative Insights from Refugee Youth in Bidi Bidi Refugee Settlement, Uganda', *BMC Public Health*, 24 (2024) <<https://doi.org/10.1186/s12889-024-20135-2>>
- Madiba, Sphiwe, and Unaswi Josiah, 'Perceived Stigma and Fear of Unintended Disclosure Are Barriers in Medication Adherence in Adolescents with Perinatal HIV in Botswana: A Qualitative Study', *BioMed Research International*, 2019 (2019) <<https://doi.org/10.1155/2019/9623159>>
- Mason, Stacey, Oliver C. Ezechi, Chisom Obiezu-Umeh, Ucheoma Nwaozuru, Rhonda BeLue, Collins Airhihenbuwa, and others, 'Understanding Factors That Promote Uptake of HIV Self-Testing among Young People in Nigeria: Framing Youth Narratives Using the PEN-3 Cultural Model', *PLoS ONE*, 17 (2022), 1–18 <<https://doi.org/10.1371/journal.pone.0268945>>
- Melkam, Mamaru, and Bezawit Melak Fente, 'Multilevel Analysis of Discrimination of People

- Living with HIV/AIDS and Associated Factors in Ghana: Demographic Health Survey of 2022 Ghana Data', *Frontiers in Public Health*, 12 (2024), 1–8 <<https://doi.org/10.3389/fpubh.2024.1379487>>
- Miller, Lara E., Sophia Zamudio-Haas, Beatrice Otieno, Sayo Amboka, Damaris Odeny, Irene Agot, and others, “‘We Don’t Fear HIV. We Just Fear Walking around Pregnant.’: A Qualitative Analysis of Adolescent Sexuality and Pregnancy Stigma in Informal Settlements in Kisumu, Kenya’, *Studies in Family Planning*, 52 (2021), 557–70 <<https://doi.org/10.1111/sifp.12178>>
- Mutumba, Massy, Fred Ssewamala, Rashida Namirembe, Ozge Sensoy Bahar, Proscovia Nabunya, Torsten Neilands, and others, ‘A Multilevel Integrated Intervention to Reduce the Impact of HIV Stigma on HIV Treatment Outcomes Among Adolescents Living With HIV in Uganda: Protocol for a Randomized Controlled Trial’, *JMIR Research Protocols*, 11 (2022), 1–19 <<https://doi.org/10.2196/40101>>
- Nabunya, Proscovia, Ozge Sensoy Bahar, Torsten B. Neilands, Noeline Nakasujja, Phionah Namatovu, Flavia Namuwonge, and others, ‘Bridges-Round 2: A Study Protocol to Examine the Longitudinal HIV Risk Prevention and Care Continuum Outcomes among Orphaned Youth Transitioning to Young Adulthood’, *PLoS ONE*, 18 (2023), 1–23 <<https://doi.org/10.1371/journal.pone.0284572>>
- Nabunya, Proscovia, William Byansi, Ozge Sensoy Bahar, Mary McKay, Fred M. Ssewamala, and Christopher Damulira, ‘Factors Associated With HIV Disclosure and HIV-Related Stigma Among Adolescents Living With HIV in Southwestern Uganda’, *Frontiers in Psychiatry*, 11 (2020), 1–10 <<https://doi.org/10.3389/fpsyt.2020.00772>>
- Nabunya, Proscovia, and Flavia Namuwonge, ‘HIV-Related Shame, Stigma and the Mental Health Functioning of Adolescents Living with HIV: Findings from a Pilot Study in Uganda’, *Child Psychiatry and Human Development*, 54 (2023), 1771–78 <<https://doi.org/10.1007/s10578-022-01374-z>>
- Nabunya, Proscovia, Flavia Namuwonge, Ozge Sensoy Bahar, Vicent Ssentumbwe, Herbert Migadde, James Mugisha, and others, ‘Stigma by Association, Parenting Stress, and the Mental Health of Caregivers of Adolescents Living With HIV in Uganda’, *Journal of Adolescent Health*, 72 (2023), S18–23 <<https://doi.org/10.1016/j.jadohealth.2022.08.017>>
- Osayi, Emmanuel O., Oluseye Ajayi, John Onyeji, Mercy Isichei, Atiene S. Sagay, and Albert Anderson, ‘The Prevalence of Internalized Stigma and Its Association with HIV Viral Suppression among Fully Disclosed Adolescents and Young Adults Living with HIV (AYLHIV) Receiving HIV Care in an HIV Clinic in Plateau State, Nigeria’, *PLoS ONE*, 19 (2024), 1–10 <<https://doi.org/10.1371/journal.pone.0303360>>
- Pantelic, Marija, Marisa Casale, Lucie Cluver, Elona Toska, and Mosa Moshabela, ‘Multiple Forms of Discrimination and Internalized Stigma Compromise Retention in HIV Care among Adolescents: Findings from a South African Cohort’, *Journal of the International AIDS Society*, 23 (2020), 1–8 <<https://doi.org/10.1002/jia2.25488>>
- Rich, Camille, Webster Mavhu, Nadine Ferris France, Vongai Munatsi, Elaine Byrne, Nicola Willis, and others, ‘Exploring the Beliefs, Experiences and Impacts of HIV-Related Self-Stigma amongst Adolescents and Young Adults Living with HIV in Harare, Zimbabwe: A Qualitative Study’, *PLoS ONE*, 17 (2022), 1–18 <<https://doi.org/10.1371/journal.pone.0268498>>
- Robinson, Abbie, Aoife Cooney, Catherine Fassbender, and David P. McGovern, ‘Examining the Relationship Between HIV-Related Stigma and the Health and Wellbeing of Children and Adolescents Living with HIV: A Systematic Review’, *AIDS and Behavior*, 27 (2023), 3133–49 <<https://doi.org/10.1007/s10461-023-04034-y>>
- Settergren, Susan K., Robert Philippe, Joanne St. Louis, Nathaniel Segaren, Sylvie Boisson,

- Tessa Lewis, and others, 'Importance of Support Groups to the Health and Well-Being of Vulnerable Children and Young People Living with HIV: A Case Study of the Kids Clubs Program in Haiti', *BMC Health Services Research*, 21 (2021), 1–13 <<https://doi.org/10.1186/s12913-021-06242-5>>
- Tadesse, Gebresilassie, Gidey Rtbey, Fantahun Andualem, Girmaw Medfu Takelle, Mamaru Melkam, Asnake Tadesse Abate, and others, 'HIV-Related Perceived Stigma and Internalized Stigma among People Living with HIV/AIDS in Africa: A Systematic Review and Meta-Analysis', *PLoS ONE*, 19 (2024), 1–26 <<https://doi.org/10.1371/journal.pone.0309231>>
- Wanjala, Stanley W., Derrick Ssewanyana, Patrick N. Mwangala, Carophine Nasambu, Esther Chongwo, Stanley Luchters, and others, 'Validity, Reliability, and Measurement Invariance of an Adapted Short Version of the HIV Stigma Scale among Perinatally HIV Infected Adolescents at the Kenyan Coast', *Global Health Research and Policy*, 6 (2021) <<https://doi.org/10.1186/s41256-021-00229-9>>
- Watt, Melissa H., Elizabeth T. Knippler, Linda Minja, Godfrey Kisigo, Brandon A. Knettel, James S. Ngocho, and others, 'A Counseling Intervention to Address HIV Stigma at Entry into Antenatal Care in Tanzania (Maisha): Study Protocol for a Pilot Randomized Controlled Trial', *Trials*, 20 (2019), 1–13 <<https://doi.org/10.1186/s13063-019-3933-z>>
- Wowolo, Gloria, Wangnan Cao, Dennis Bosomtwe, Anthony Enimil, Nicholas Tarantino, David H. Barker, and others, 'The Impact of Different Parental Figures of Adolescents Living With HIV: An Evaluation of Family Structures, Perceived HIV Related Stigma, and Opportunities for Social Support', *Frontiers in Public Health*, 10 (2022), 1–7 <<https://doi.org/10.3389/fpubh.2022.647960>>
- Yuan, Guangzhe Frank, Ran Zhang, Shan Qiao, Xiaoming Li, Zhiyong Shen, and Yuejiao Zhou, 'Exploring the Longitudinal Influence of Perceived Social Support, HIV Stigma, and Future Orientation on Depressive Symptoms Among People Living with HIV in China', *AIDS and Behavior*, 28 (2024), 1662–72 <<https://doi.org/10.1007/s10461-024-04292-4>>