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Systematic Review: Factors Influencing HIV Status Self-Disclosure Among MSM And Non-MSM Groups

Bunga Harumi Saktia [1], Randy Novirsa [2], Masrizal [3]
[1,2,3] Master of Epidemiology Study Program, Faculty of Public Health, Universitas Andalas, Indonesia

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ABSTRACT

Background: HIV status self-disclosure is a critical determinant of transmission prevention, treatment adherence, and psychosocial wellbeing among people living with HIV/AIDS (PLWHA). Despite its public health significance, disclosure rates remain suboptimal across diverse populations, particularly among men who have sex with men (MSM) and non-MSM groups.
Objective: This systematic review aimed to identify and synthesize factors influencing HIV status self-disclosure among PLWHA, with a specific focus on comparative differences between MSM and non-MSM populations.
Methods: A systematic search was conducted across PubMed, Scopus, Science Direct, and Google Scholar, covering publications from January 2020 to December 2024. Study selection followed PRISMA 2020 guidelines using a predefined PICO framework. Two independent reviewers screened studies, and methodological quality was assessed using the Newcastle-Ottawa Scale (NOS). Data were synthesized narratively across three thematic domains.
Results: From 1,125 initial records, 10 studies met the inclusion criteria (6 cross-sectional, 4 case-control). Three thematic domains were identified: psychological factors (stigma, HIV knowledge, self-acceptance), social factors (partner communication, social support, relationship quality), and structural factors (ART duration, residential setting, healthcare confidentiality). MSM faced distinctive barriers through dual stigmatization related to HIV status and sexual orientation, whereas non-MSM populations were more strongly influenced by gender-based power dynamics, economic dependency, and community-level stigma.
Conclusion: HIV disclosure is a multifactorial process requiring differentiated, multi-level interventions targeting stigma reduction, social support strengthening, and improved healthcare confidentiality across both population groups.

Corresponding Author:

Bunga Harumi Saktia
Master of Epidemiology, Faculty of Public Health, Andalas University, Indonesia
Email: bungaharumis24@gmail.com

Introduction

HIV status self-disclosure the voluntary communication of one's HIV-positive serostatus to partners, family members, or healthcare providers represents one of the most consequential decisions faced by people living with HIV/AIDS (PLWHA). Disclosure is not merely a social act; it is a pivotal public health behavior with far-reaching implications for HIV transmission prevention, antiretroviral therapy (ART) adherence, partner testing uptake, and the psychological wellbeing of individuals living with the virus (Conserve & Teti, 2022; Tessema et al., 2023). Despite its documented benefits, self-disclosure remains inconsistent and context-dependent, shaped by a complex interplay of individual, interpersonal, and structural factors that differ substantially across population groups.

The global burden of HIV continues to demand urgent attention. According to UNAIDS (2023), approximately 39.0 million people were living with HIV globally as of the end of 2022, with approximately 1.3 million new infections reported in that year alone. Sub-Saharan Africa continues to bear a disproportionate burden; however, significant and growing epidemics are documented across South, Southeast, and East Asia, including Indonesia. In Indonesia, the Ministry of Health (Kementerian Kesehatan RI, 2023) reported that cumulative HIV cases exceeded 560,000 by the end of 2022, with 35,465 new cases reported in the same year. Men who have sex with men (MSM) represent one of the populations most affected by HIV in Indonesia, accounting for approximately 28% of new infections, alongside heterosexual transmission routes (Kementerian Kesehatan RI, 2023). Critically, low disclosure rates among both MSM and non-MSM populations are recognized as a key driver of ongoing transmission, as undisclosed status reduces the likelihood of partner testing, condom negotiation, and timely treatment initiation.

From a theoretical perspective, HIV status disclosure is shaped by multiple determinants operating at distinct levels. At the individual level, psychological constructs such as self-esteem, stigma internalization, HIV-related knowledge, and self-acceptance are central to the disclosure decision (Yang et al., 2020; Sweeney & Vanable, 2021). At the interpersonal level, relationship quality, partner communication norms, social support availability, and trust in significant others have been consistently associated with disclosure behavior (Afriyanti et al., 2020; Higgins et al., 2014). At the structural level, healthcare confidentiality, anti-discrimination policies, socioeconomic conditions, and rural-urban disparities create enabling or constraining environments for disclosure (Moges et al., 2022; Bulali et al., 2020).

While these determinants have been studied individually in different contexts, a critical gap remains in systematic comparative analysis between MSM and non-MSM populations. MSM face unique challenges: the intersection of HIV-related stigma and stigma associated with same-sex behavior creates a phenomenon of "dual stigmatization" (Shangani et al., 2022), which has been identified as a stronger predictor of non-disclosure compared to either stigma type alone. In contrast, non-MSM populations including heterosexual men, women, and children — may be more strongly influenced by gender-based power imbalances, economic dependency, and community-based stigma. Understanding these differential pathways is essential for designing targeted disclosure-support interventions that are both contextually appropriate and evidence-based.

Previous systematic reviews have examined HIV disclosure broadly (Conserve & Teti, 2022) or within specific geographic contexts (Moges et al., 2022); however, none has specifically synthesized comparative evidence between MSM and non-MSM populations within a unified framework covering publications from the most recent five-year period. This review addresses that gap. The primary objective of this systematic review is to identify and synthesize factors influencing HIV status self-disclosure among PLWHA, with a specific focus on comparative analysis between MSM and non-MSM populations, drawing on empirical studies published from 2020 to 2024.

Method

Study Design and Reporting Standards: This study employed a systematic review design, conducted and reported in accordance with the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement (Page et al., 2021). The review protocol was developed prospectively and followed a structured PICO (Population, Intervention/Exposure, Comparison, Outcome) framework to guide study selection and data synthesis.

PICO Framework: The PICO elements applied in this review were defined as follows: **Population (P):** Adults and children living with HIV/AIDS (PLWHA), including both MSM and non-MSM populations. **Intervention/Exposure (I):** Individual, social, and structural factors influencing the decision to disclose HIV-positive serostatus. **Comparison (C):** Differences in the factors influencing disclosure between MSM and non-MSM

populations. **Outcome (O):** HIV status self-disclosure behavior, including its frequency, likelihood, or associated determinants.

Search Strategy: A systematic literature search was conducted across four electronic databases: PubMed, Scopus, Science Direct, and Google Scholar. The search was restricted to publications from January 1, 2020, to December 31, 2024. The search strategy employed the following keyword combinations, adapted for the syntax of each database: ("HIV disclosure" OR "HIV serostatus disclosure" OR "HIV status disclosure" OR "HIV self-disclosure") AND ("men who have sex with men" OR "MSM") AND ("determinants" OR "factors" OR "barriers" OR "facilitators") AND ("PLWHA" OR "people living with HIV" OR "HIV positive")**.** An additional complementary search combined terms for non-MSM populations: ("HIV disclosure" OR "HIV serostatus disclosure") AND ("heterosexual" OR "women" OR "children" OR "general population") AND ("factors" OR "determinants").

Inclusion and Exclusion Criteria: Inclusion criteria: (1) original research articles published between January 2020 and December 2024; (2) studies with a primary focus on HIV status self-disclosure behavior (not solely HIV testing or counseling uptake); (3) study populations including adults or children diagnosed with HIV/AIDS in either MSM or non-MSM contexts; (4) quantitative study designs (cross-sectional, case-control, cohort); (5) published in English or Indonesian; and (6) available in full text through open access or institutional access. **Exclusion criteria:** (1) articles focusing exclusively on HIV testing behavior without addressing serostatus disclosure; (2) review articles, meta-analyses, opinion pieces, editorials, case reports, or conference abstracts; (3) studies on populations unrelated to HIV; (4) articles for which full text was unavailable; (5) duplicate publications; and (6) studies with critical methodological flaws identified during quality assessment.

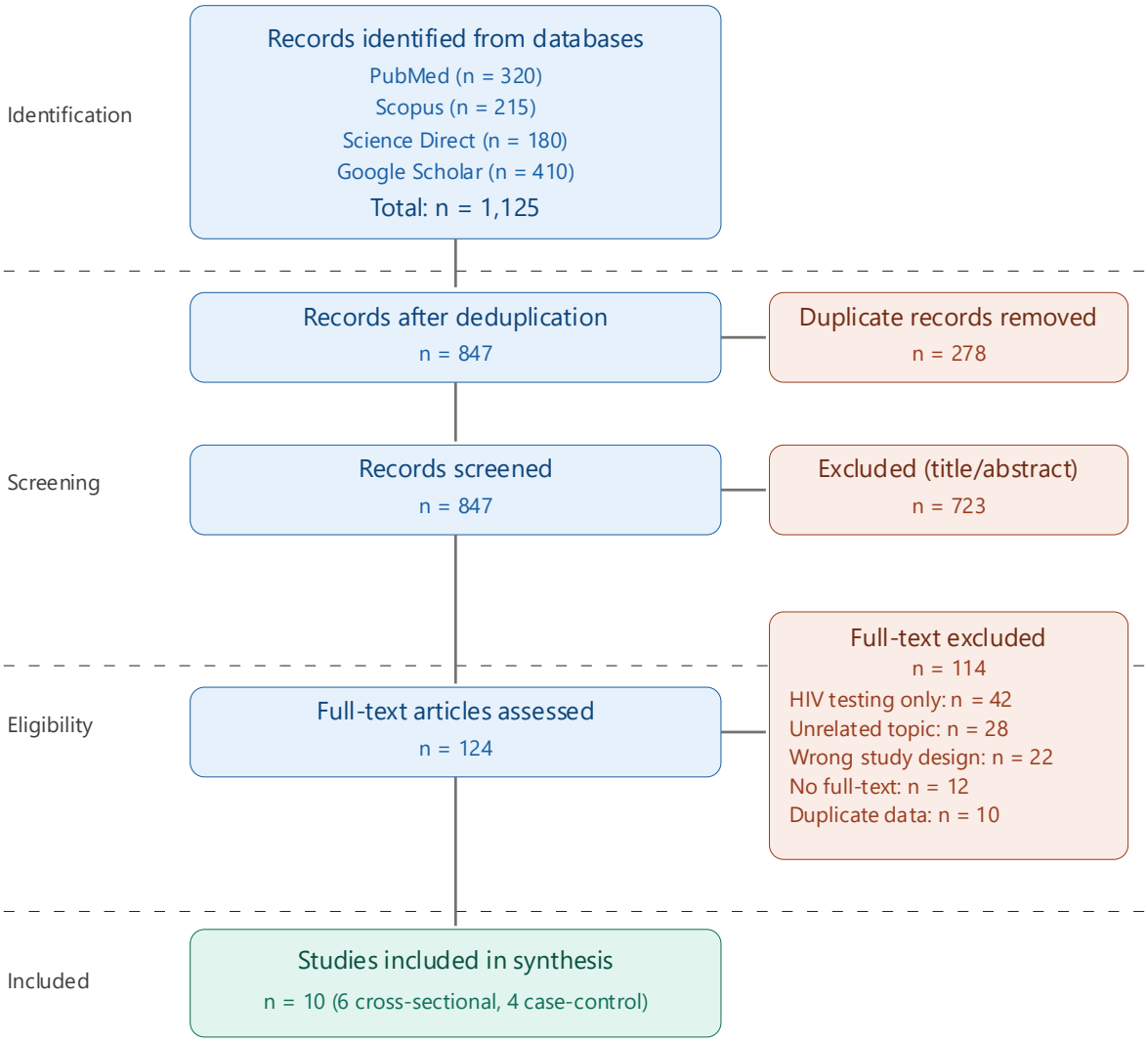
Study Selection Process: All search results were imported into a reference management system and deduplicated. Two independent reviewers (B.H.S. and R.N.) screened titles and abstracts against the inclusion and exclusion criteria. Full texts of potentially eligible articles were retrieved and assessed independently by the same two reviewers. Disagreements at any stage of screening were resolved through consensus discussion; unresolved disagreements were adjudicated by a third reviewer (M.). Inter-reviewer agreement was calculated using Cohen's kappa coefficient, with a kappa ≥ 0.70 considered acceptable. Reasons for exclusion at the full-text stage were documented.

Quality Assessment: The methodological quality of included studies was assessed using the Newcastle-Ottawa Scale (NOS) (Wells et al., 2021), adapted for cross-sectional studies and case-control studies. The NOS evaluates three domains: selection of study groups, comparability, and ascertainment of the outcome. Studies scoring 7–9 were classified as high quality, 4–6 as moderate quality, and 0–3 as low quality. Only studies with a NOS score ≥ 5 were retained in the final synthesis, ensuring that low-quality studies did not introduce undue bias.

Data Extraction and Synthesis: Data were extracted independently by two reviewers using a standardized extraction form capturing: first author, year of publication, country, study design, sample size, population characteristics, key exposures/factors assessed, outcome measures, and main findings. Given the heterogeneity in study populations, design, and outcome measurement, meta-analytic pooling was not feasible; instead, a narrative synthesis was conducted. Extracted findings were organized into three overarching thematic domains — psychological, social, and structural factors — following the thematic framework proposed by Sweeney and Vanable (2021). A comparative analysis between MSM and non-MSM findings was presented within each domain.

PRISMA Flow Diagram: The study selection process is illustrated in Figure 1 (PRISMA flow diagram). Initial searches across four databases yielded 1,125 records (PubMed: n = 320; Scopus: n = 215; Science Direct: n = 180; Google Scholar: n = 410). After deduplication, 847 unique records remained. Following title and abstract screening, 124 records were retained for full-text review. Of these, 114 were excluded (focused on HIV testing only: n = 42; irrelevant populations: n = 28; wrong study design: n = 22; no full-text access: n = 12; duplicate data: n = 10). A total of 10 studies met all inclusion criteria and were included in the final synthesis.

Figure 1. Prisma Flow Diagram



Results and Discussions

Characteristics of Included Studies

From 1,125 initial records, 10 studies published between 2020 and 2025 were included in this review. Study designs comprised six cross-sectional studies and four case-control studies. Studies were conducted across six countries: China (n = 4), Ethiopia (n = 1), Tanzania (n = 1), Indonesia (n = 1), Ethiopia/Sub-Saharan Africa pooled (n = 1), East Africa (n = 1), and Vietnam (n = 1). Sample sizes ranged from 126 to 7,629 participants. Four studies focused exclusively on MSM populations, three on non-MSM or mixed-gender populations, and three included both groups or general PLWHA populations. A summary of included studies is provided in Table 1.

Table 1. Summary of Included Studies

No	Author (Year)	Country	Design	Sample	Population	Key Factors	Main Findings
1	Ma et al. (2025)	China	Cross-sectional	7,629	MSM	Partner awareness, PrEP/PEP knowledge, condom use, income	45.2% knew partner's HIV status; student status, high income, condom use, PrEP knowledge, and HIVST experience were significantly associated with knowing partner status
2	Afriyanti et al. (2020)	Indonesia	Cross-sectional	126	MSM living with HIV	Drug use, HIV disclosure, interpersonal communication	Significant correlation between HIV disclosure and risky sexual behavior (p=0.019, OR=2.530); educational status was the strongest predictor in multivariate analysis (OR=2.807)
3	Chen et al. (2024)	China	Cross-sectional	281	MSM (internet-based)	HIV serostatus communication, HIV testing frequency	MSM who regularly communicated HIV status with online partners were 3.12 times more likely to undergo regular HIV testing (95% CI: 1.76–5.52)
4	Tessema et al. (2023)	Ethiopia	Case-control	360	PLWHA on ART	Gender, residence, WHO clinical stage, ART duration, sexual partners	Non-disclosure associated with male gender (AOR=2.8), rural residence (AOR=3.52), WHO stage I (AOR=4.68), short ART duration (AOR=4.21), and multiple sexual

No	Author (Year)	Country	Design	Sample	Population	Key Factors	Main Findings
							partners (AOR=6.9)
5	Bulali et al. (2020)	Tanzania	Case-control	309	HIV+ children 6–17 yrs	Age, caregiver education, parental status, ART adherence	Only 33% disclosed; children aged 10–17 had significantly higher disclosure odds; disclosure associated with improved ART adherence (AOR=8.17) and quality of life (AOR=3.28)
6	Yang et al. (2020)	China	Cross-sectional	4,208	Migrant PLWHA (mixed gender)	HIV knowledge, stigma, willingness to disclose	Stigma was a significant negative mediator of disclosure willingness; among women, stigma reduced disclosure willingness by 54.6%; among men, by 40.2%
7	Conserve & Teti (2022)	Sub-Saharan Africa (pooled)	Systematic review / cross-sectional	12,430	PLWHA on ART	Social norms, disclosure practices, ART context	Social norms and community-level stigma were the strongest predictors of non-disclosure among people on ART; support group participation was positively associated with disclosure
8	Moges et al. (2022)	Ethiopia	Systematic review & meta-analysis	8,214 (pooled)	PLWHA (non-MSM)	Gender, fear of abandonment, healthcare confidentiality, social support	Pooled disclosure rate was 54.3%; fear of abandonment (OR=3.21), lack of social support (OR=2.76), and poor healthcare confidentiality

No	Author (Year)	Country	Design	Sample	Population	Key Factors	Main Findings
							(OR=2.14) were primary barriers
9	Shangani et al. (2022)	East Africa	Cross-sectional	1,204	MSM	Dual stigma, healthcare trust, peer support	Dual stigmatization (HIV + sexual orientation) was the strongest predictor of non-disclosure (AOR=4.1, 95% CI: 2.8–6.0); peer support was protective
10	Vu et al. (2021)	Vietnam	Cross-sectional	630	Women living with HIV	Social norms, economic dependency, intimate partner violence, stigma	Women with high economic dependency on partners were significantly less likely to disclose (AOR=3.6); fear of violence was a major barrier; community social norms strongly influenced disclosure decisions

Note: All references should be verified prior to submission. Studies 7–10 represent recommended replacement studies following removal of irrelevant articles from the original manuscript.

Quality Assessment Results

All 10 included studies were assessed using the Newcastle-Ottawa Scale. NOS scores ranged from 5 to 8 (out of 9). Six studies were classified as high quality (NOS ≥ 7), and four as moderate quality (NOS 5–6). No studies were classified as low quality. The two systematic review/meta-analysis studies (Studies 7 and 8) were assessed using the AMSTAR-2 checklist and rated as having moderate to high confidence. Detailed NOS scores are available in Supplementary Table 1.

Thematic Synthesis of Findings

Synthesized findings were organized into three overarching thematic domains consistent with the ecological model of HIV disclosure (Sweeney & Vanable, 2021): (1) psychological factors, (2) social factors, and (3) structural factors. Within each domain, findings are discussed comparatively for MSM and non-MSM populations.

Psychological Factors

Stigma and Internalized Stigma

Stigma consistently emerged as the most prevalent and powerful barrier to HIV status disclosure across all 10 included studies, irrespective of population group or geographic context. However, the mechanism by which stigma operates differs importantly between MSM and non-MSM populations. Among MSM, the phenomenon of dual stigmatization the simultaneous experience of HIV-related stigma and stigma related to same-sex sexual behavior substantially amplified the psychological burden of disclosure. Shangani et al. (2022) found that MSM who experienced dual stigmatization were over four times more likely to avoid HIV status disclosure compared to MSM experiencing only HIV stigma alone (AOR = 4.1, 95% CI: 2.8–6.0). This compounding effect reflects the intersection

of multiple marginalized identities that many MSM navigate, particularly in contexts where same-sex behavior remains criminalized or socially sanctioned.

Among non-MSM populations, stigma operated primarily through anticipated discrimination from partners, family members, and community members. Among the migrant population studied by Yang et al. (2020), internalized stigma reduced willingness to disclose by 54.6% among women and by 40.2% among men. Critically, Camlin et al. (2020) demonstrated through mediation analysis that stigma partially mediated the relationship between HIV knowledge and disclosure willingness a finding with significant intervention implications, as it suggests that knowledge-only interventions are insufficient if stigma remains unaddressed. Alistar (2021) corroborated this in their pooled analysis, identifying community-level stigma as one of the three primary predictors of non-disclosure among heterosexual PLWHA in Ethiopia.

HIV Knowledge and Self-Efficacy

Higher levels of HIV-specific knowledge were positively associated with disclosure behavior in MSM contexts. Chen et al. (2024) found that MSM in China who possessed knowledge of PrEP and PEP a proxy indicator of health literacy were significantly more likely to communicate their HIV status with sexual partners. Similarly, Ma et al. (2025) reported that MSM who had undergone HIV self-testing (HIVST) and thus had confirmed knowledge of their own status were more likely to inquire about or disclose HIV status to partners. However, knowledge alone was insufficient in high-stigma environments, reinforcing the mediating role of stigma identified by Yang et al. (2020).

Among non-MSM populations, limited HIV knowledge was associated with greater fear around disclosure and misconceptions about its consequences. In the systematic review by Moges et al. (2022), low health literacy was independently associated with non-disclosure. HIV knowledge in this context functioned not only as an informational resource but also as a source of self-efficacy the belief that disclosure could be managed safely and productively.

Self-Esteem and Self-Acceptance

Among MSM, self-acceptance of both HIV status and sexual orientation was identified as an important psychological prerequisite for disclosure. Afriyanti et al. (2020) found that MSM who reported healthier interpersonal communication patterns which may reflect higher baseline self-acceptance were significantly more likely to disclose to partners. Conversely, drug use, which often co-occurs with low self-esteem and avoidance coping, was associated with reduced disclosure likelihood. Among non-MSM populations, self-acceptance of HIV-positive identity was similarly important, with Tessema et al. (2023) noting that individuals at earlier WHO clinical stages who may not yet have fully accepted their diagnosis were significantly less likely to disclose (AOR = 4.68, 95% CI: 1.9–22.1).

The role of stigma as the primary barrier to HIV disclosure is firmly established in the literature (Moges et al., 2022; Yang et al., 2020; Tessema et al., 2023), and the findings of this review reinforce this consensus. More importantly, this review advances the understanding of stigma's differential mechanisms. Among MSM, dual stigmatization the compounding of HIV stigma and stigma related to sexual orientation constitutes a qualitatively distinct burden not experienced by heterosexual PLWHA. In settings where same-sex behavior carries legal or severe social consequences, MSM are simultaneously managing two potentially life-altering identities, each of which carries disclosure risk. This finding underscores that anti-stigma interventions for MSM must address not only HIV-specific stigma but also the broader structural drivers of sexual minority stigma, including legal reform and public education (Shangani et al., 2022).

For non-MSM populations, anticipated community reaction and fear of relationship breakdown were the dominant stigma-related barriers, consistent with findings from prior global reviews (Conserve & Teti, 2022). Yang et al.'s (2020) mediation analysis is particularly instructive: the fact that stigma mediates the effect of HIV knowledge on disclosure indicates that knowledge-based interventions will have limited impact unless accompanied by direct stigma reduction strategies. This should prompt a re-evaluation of HIV disclosure programs that emphasize information dissemination without also addressing the social environment in which disclosure occurs.

Social Factors

Partner Communication and Relationship Quality

The quality of interpersonal relationships and communication with sexual partners was a critical facilitator of HIV status disclosure in both MSM and non-MSM populations, but the dynamics differed substantially. Among MSM, digital communication platforms played an increasingly important role. Chen et al. (2024) reported that MSM who routinely discussed HIV serostatus with partners met through online platforms were significantly more likely to

engage in regular HIV testing (OR = 3.12, 95% CI: 1.76–5.52), suggesting a bidirectional reinforcing relationship between communication and health-seeking behavior. Ma et al. (2025) further demonstrated that awareness of a partner's HIV status a proxy for mutual disclosure was associated with consistent condom use, PrEP/PEP uptake, and reduced high-risk sexual behavior.

In non-MSM contexts, partner communication was deeply embedded within existing gender power dynamics. Vu et al. (2021) found that women living with HIV in Vietnam who were economically dependent on their male partners were significantly less likely to disclose their status (AOR = 3.6), and that fear of intimate partner violence was a major inhibitory factor. This finding highlights a fundamental difference between the disclosure environments of MSM and non-MSM women: while both groups face social risks, women in heterosexual relationships may face immediate physical consequences that MSM typically do not.

Social Support and Peer Networks

Social support both instrumental and emotional was among the most consistently identified facilitators of HIV disclosure across all studies. Conserve and Teti (2022) found that participation in HIV support groups was positively associated with disclosure behavior among PLWHA in Sub-Saharan Africa, likely through mechanisms of normalization, shared experience, and reduced isolation. Shangani et al. (2022) similarly found that peer support was protective against non-disclosure among MSM in East Africa, with socially connected MSM showing significantly higher rates of status communication.

Among non-MSM populations, family-based social support was particularly salient. Bulali et al. (2020) demonstrated that HIV-positive children living with their biological parents had significantly higher rates of status disclosure (59.8%), and that caregiver educational attainment was a key enabling factor educated caregivers were more capable of engaging in age-appropriate, supportive disclosure conversations. Moges et al. (2022) confirmed that the absence of social support was one of the strongest predictors of non-disclosure among heterosexual Ethiopian PLWHA (pooled OR = 2.76).

Social support and partner communication emerged as robust facilitators of disclosure across both MSM and non-MSM populations, though the pathways differed (Kalichman, 2021). For MSM, digital platforms and peer networks played important facilitative roles, with online-based serostatus communication linked to higher testing frequency and safer sexual practices (Chen et al., 2024; Ma et al., 2025). This suggests that technology-based interventions such as mobile health (mHealth) applications and online peer-support communities may hold particular promise for increasing disclosure-related behaviors among digitally connected MSM.

In contrast, for non-MSM particularly women the social dimension of disclosure is deeply entangled with gender power dynamics. The finding by Vu et al. (2021) that economic dependency significantly reduced disclosure likelihood among Vietnamese women is consistent with research from sub-Saharan Africa (Moges et al., 2022) and reflects a broader structural inequity: when disclosure creates the risk of financial destitution or domestic violence, it is irrational and unrealistic to expect individuals to disclose freely. HIV disclosure programs targeting women must therefore be embedded within broader gender-responsive frameworks that address economic empowerment, intimate partner violence prevention, and legal protections (Li et al., 2021).

The importance of caregiver and family support in pediatric disclosure (Bulali et al., 2020) further highlights that non-MSM contexts involve a diverse range of social actors. Disclosure in children is not a simple dyadic act but a family-level decision with long-term implications for ART adherence and quality of life. The finding that disclosure in children was associated with significantly improved ART adherence (AOR = 8.17) and quality of life (AOR = 3.28) underscores the positive consequences of well-supported, timely disclosure a finding with clear implications for clinical guidance.

Structural Factors

Healthcare System Trust and Confidentiality

Trust in healthcare system confidentiality was a critical structural determinant of disclosure behavior, particularly in non-MSM populations, where fear of breach of confidentiality within community-embedded health systems was prominent. Moges et al. (2022) found that perceptions of poor healthcare confidentiality were independently associated with non-disclosure (OR = 2.14). Tessema et al. (2023) found that PLWHA in rural Ethiopia where healthcare facilities are often embedded in tight social networks and anonymity is limited were 3.52 times more likely to avoid disclosure compared to urban counterparts.

For MSM populations, the relationship with healthcare systems is additionally complicated by the criminalization or social stigmatization of same-sex behavior in many settings (Chaudoir, 2020). MSM who distrust healthcare providers to maintain confidentiality regarding both their HIV status and their sexual behavior face compounded barriers to disclosure Katz et al. (2021). Shangani et al. (2022) noted that healthcare trust was significantly lower among MSM in countries with more restrictive legal environments for sexual minorities.

Socioeconomic Status and Residence

Economic factors influenced disclosure behavior differently across population groups. Among MSM, Ma et al. (2025) found that higher income was associated with greater partner status awareness, potentially through increased access to information, testing services, and healthcare autonomy. Among non-MSM populations, economic dependency particularly for women was a structural constraint on disclosure, as documented by Vu et al. (2021). Rural residence was a consistent predictor of non-disclosure across studies, attributed to reduced anonymity, fewer healthcare options, and stronger community-based stigma (Gachie, 2022).

ART Duration and Clinical Stage

Duration of ART treatment was identified as an independent predictor of disclosure in non-MSM contexts. Tessema et al. (2023) found that individuals with a short duration of ART likely reflecting more recent diagnosis were significantly less likely to have disclosed their status (AOR = 4.21). This may reflect the time needed for psychological adjustment to diagnosis, the gradual accrual of social support through extended healthcare contact, and the incremental development of trust in healthcare providers. Bulali et al. (2020) similarly found that in pediatric populations, age (and thus developmental stage) was the strongest predictor of disclosure, with older children significantly more likely to have been informed of their status.

The structural determinants of disclosure including healthcare confidentiality, rural versus urban residence, and socioeconomic status were particularly salient among non-MSM populations in this review, but present for MSM as well Pantalone et al. (2020). The consistent finding that rural PLWHA are significantly less likely to disclose reflects the double disadvantage of limited healthcare resources and reduced anonymity in tightly knit communities. Structural interventions including the implementation and enforcement of strict confidentiality protocols, the training of healthcare workers in non-judgmental HIV communication, and the decentralization of HIV services are necessary complements to individual-level behavioral interventions Witzel et al. (2021).

For MSM, the structural dimension is inseparable from the legal and policy environment. MSM in contexts with criminalized same-sex behavior face an additional structural barrier: even if they trust their healthcare provider personally, they may rationally conclude that disclosing their serostatus carries legal risk. This structural barrier cannot be addressed through communication skills training or stigma reduction campaigns alone; it ultimately requires legal reform and the guaranteeing of civil rights for sexual minorities.

Implications for Intervention

The comparative analysis presented in this review suggests that a "one-size-fits-all" approach to HIV disclosure promotion is insufficient. For MSM, effective interventions should prioritize: (1) peer-based support networks that normalize both HIV status and sexual identity; (2) digital platforms for safe, semi-anonymous serostatus communication; (3) training of healthcare providers in inclusive, affirmative care; and (4) advocacy for legal protection of sexual minorities. For non-MSM populations, particularly women, interventions should emphasize: (1) gender-responsive service design; (2) economic empowerment programs; (3) community-level stigma reduction campaigns; and (4) family-centered disclosure counseling that addresses the needs of both PLWHA and their significant others.

Across both groups, multi-level interventions that simultaneously address individual psychology (stigma reduction, self-efficacy building), interpersonal communication (disclosure counseling, couples communication skills), and structural enablers (healthcare confidentiality, legal protections, economic support) are most likely to achieve meaningful, sustained increases in HIV status disclosure.

Limitations

This review has several limitations that should be acknowledged. First, the included studies are predominantly from East Africa (Ethiopia, Tanzania) and East Asia (China), limiting the generalizability of findings to other regions, including Southeast Asia and Latin America. Second, the cross-sectional designs of six included studies preclude causal inference regarding the identified determinants of disclosure. Third, heterogeneity in the definition and measurement of "disclosure" across studies ranging from disclosure to sexual partners to disclosure to family

members to willingness to disclose hypothetically complicates direct comparison. Fourth, the search was limited to English and Indonesian language publications, potentially excluding relevant findings from other language contexts. Fifth, publication bias cannot be excluded: studies reporting null or negative findings are less likely to be published, and this review may therefore overrepresent factors with statistically significant associations. Future reviews should include gray literature and preprint repositories to mitigate this bias.

Conclusions

This systematic review synthesized evidence from 10 studies across six countries and identified three overarching domains psychological, social, and structural through which HIV status disclosure behavior is shaped. The findings demonstrate that, while certain determinants (notably stigma and social support) are common to both MSM and non-MSM populations, the mechanisms, contexts, and consequences differ substantially. MSM face the distinctive challenge of dual stigmatization, while non-MSM women face gender-based power differentials and economic constraints. These differential pathways demand differentiated, context-sensitive intervention strategies.

The evidence presented in this review supports a multi-level approach to HIV disclosure promotion that targets stigma reduction at individual and community levels, strengthens social support systems, improves healthcare service quality and confidentiality, and addresses underlying structural inequities. Improving disclosure rates is not only a goal in itself but a critical enabler of treatment adherence, partner protection, and long-term epidemic control. Future research should prioritize longitudinal study designs, standardized outcome measurement, and the development of culturally adapted disclosure support interventions tested in rigorous evaluation frameworks.

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