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Lived Experience of Stigma among People Living with HIV-tuberculosis Co-infection: A Phenomenological Study

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ABSTRACT

Background: Stigma constitutes a major barrier to effective HIV–tuberculosis (HIV–TB) care among key populations experiencing intersecting social and structural vulnerabilities. However, the lived experiences of stigma among key populations within HIV-TB care remain insufficiently explored. This study aimed to explore the lived experiences of stigma among people living with HIV-TB co-infection in Indonesia.

Methods: A descriptive phenomenological study was conducted among 16 purposively selected individuals diagnosed with HIV-TB from key informants in Lampung Province, Indonesia. The overall study was conducted from August to November 2025 over four-months. Data were collected through one-time in-depth semi-structured interviews and analyzed manually using Colaizzi's seven-step method. Recruitment continued until data saturation was achieved, indicated by the absence of new themes in successive interviews.

Results: The analysis identified 11 subthemes that were further organized into 3 overarching themes: (1) multidimensional stigma surrounding patients with HIV-TB, encompassing internalized stigma, family and community stigma, anticipated stigma, and moral judgment; (2) stigma as a barrier to HIV-TB care, reflected in discriminatory health service procedures, fragmented services, and avoidance of care; and (3) psychosocial resilience and adaptive coping among patients with HIV-TB, including emotional resilience, peer support, selective disclosure, and meaning-making.

Conclusion: Stigma remains deeply embedded in the everyday experiences of people living with HIV-TB and continues to influence engagement with care at individual, interpersonal, and structural levels. These findings highlight the critical role of nurses and community-based HIV-TB services in fostering trust, delivering stigma-sensitive care, and supporting sustained engagement among marginalized populations.

Keywords: HIV; Social Stigma; Tuberculosis; Vulnerable Populations

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Introduction

HIV-tuberculosis (HIV-TB) co-infection remains a substantial global public health problem, particularly in low- and middle-income countries where the epidemiological burden of both diseases is disproportionately concentrated.[1] Globally, an estimated 40.8 million people are living with HIV.[2] TB remains a major cause of death among people living with HIV; in 2024, TB caused an estimated 150,000 deaths among people with HIV, representing approximately one quarter of global HIV/AIDS-related mortality.[3] Despite significant advances in antiretroviral therapy and TB treatment, HIV-TB co-infection persists as a major challenge for health systems seeking to ensure continuity of care, long-term treatment adherence, and improved quality of life for affected individuals.[4] These figures underscore that HIV-TB co-infection is not only a biomedical concern but also a complex social and health care challenge that requires sustained, person-centered responses.[5]

In countries with concentrated epidemics, individuals affected by HIV-TB frequently experience overlapping social and structural vulnerabilities that complicate their engagement with health services.[6, 7] Beyond clinical symptoms, HIV-TB co-infection is closely associated with poverty, unstable employment, social marginalization, and limited access to supportive health care.[8] These challenges are particularly pronounced among key populations, including men who have sex with men (MSM), transgender women, and other socially marginalized groups.[9] For these populations, experiences of illness are often inseparable from those of social judgment, exclusion, and discrimination, shaping how care is perceived, accessed, and sustained over time.[10] As a result, HIV-TB care among key populations cannot be understood solely through clinical outcomes but must be situated within broader social and relational contexts.[11]

One of the most pervasive challenges influencing HIV-TB care is stigma.[10] Extensive evidence demonstrates that stigma is associated with delayed diagnosis, poor treatment adherence, and loss to follow-up among people living with HIV and TB.[12] However, stigma should not be understood merely as an individual psychological reaction to illness.[13] Rather, stigma is a socially constructed and relational phenomenon, embedded within cultural beliefs, moral discourses, and power relations that operate across families, communities, and health-care institutions.[14] In everyday life, stigma manifests through labeling, distancing, moral judgment, and fear of disclosure, often becoming normalized within social interactions and routine health-care encounters.[15]

People living with HIV–TB frequently experience stigma as a continuous and cumulative process rather than as a single event.[5, 16] Repeated exposure to stigmatizing attitudes may lead to internalized stigma, emotional distress, and social withdrawal, which in turn undermine confidence in health services and motivation to engage consistently with long-term treatment.[17] These effects are particularly evident among key populations, where illness-related stigma intersects with pre-existing stigma related to sexual orientation, gender identity, drug use, or socioeconomic status.[18] Such intersecting stigmas intensify vulnerability and create complex barriers to care that extend beyond what can be captured through biomedical indicators alone.[19]

The intersection of stigma, key population status, and HIV–TB co-infection in Indonesia presents unique challenges for health-care delivery. National strategies increasingly emphasize integrated and community-based HIV-TB services to improve access and continuity of care.[20] Community-based care is often positioned as a more accessible and supportive alternative to facility-based services, particularly for marginalized populations.[21]

However, how stigma is experienced, negotiated, and linked to HIV-TB care engagement among key populations remains insufficiently understood.[22] Previous

qualitative studies have examined stigma among people living with HIV or tuberculosis separately, or among general patient populations,[23, 24] but limited attention has been given to the compounded stigma experienced by key populations living with HIV-TB within care settings. This gap is important because stigma in HIV-TB care may involve not only disease-related shame and social judgment, but also fear of disclosure, discriminatory encounters, and avoidance of health services.

Phenomenology is well suited to capturing how individuals make sense of these experiences and how meaning is constructed through everyday interactions with families, communities, and health-care providers. Therefore, this study aimed to explore the lived experiences of stigma among people living with HIV-TB in Indonesia, particularly how stigma is experienced, interpreted, and negotiated in personal, family, community, and health-care contexts.

Materials And Methods

The descriptive phenomenological study was conducted in community-based and outpatient settings providing integrated HIV-TB services in Lampung, Indonesia. The overall study was conducted from August to November 2025 over a four-month period. The study adhered to the Consolidated Criteria for Reporting Qualitative Research (COREQ) guideline to ensure methodological rigor and transparency.[25] Phenomenology was selected because it allows for an in-depth exploration of subjective experiences and captures the essence of a phenomenon as it is lived, without imposing predetermined theoretical assumptions. This approach was considered particularly appropriate given that stigma in HIV-TB care is a complex, relational, and context-dependent experience.

Participants were recruited using purposive and snowball sampling to obtain deep, rich, relevant, and abstract accounts of stigma experiences related to HIV-TB. The recruitment process was conducted in collaboration with health-care providers at the participating community health centers. The researcher initially contacted health-care providers at the Puskesmas, who identified potentially eligible participants based on medical records and subsequently contacted them to provide information about the study. Individuals who expressed willingness to participate were then connected with the researcher, and an interview appointment was arranged according to their preferred location.

Inclusion criteria were individuals who were aged 18 years or older, as this age allowed the participants to provide independent informed consent for discussing sensitive HIV-TB stigma experiences, had been diagnosed with HIV-TB as identified from medical records in community health centers, were identified as belonging to key populations (such as MSM, people who use drugs, or other socially marginalized groups), had experience in engaging with HIV-TB health services, had no severe cognitive or communication impairments that limited their ability to express their lived experiences, and were willing and able to articulate their experiences of stigma related to HIV-TB care. Exclusion criteria included individuals who were too physically unwell to participate in an in-depth interview, and those who declined audio-recording or withdrew consent during the study process.

Data were collected through in-depth, semi-structured interviews with each participant. A single in-depth semi-structured interview was conducted with each participant. Interviews were conducted either at the participant's home or in a private consultation room at the participating community health center, according to the participant's preference and consideration of privacy and convenience. An interview guide was developed to explore the participants' experiences of stigma across family, community, and health-care contexts, as well as its perceived impact on treatment engagement, disclosure, and emotional well-being. Core questions included phenomenological prompts such

as: "What does it mean for you to live with stigma related to HIV-TB care?" and "When you hear the phrase stigma related to HIV-TB care, what is the first thing that comes to your mind?" Examples of probing questions included: "Can you tell me more about that experience?", "How did that situation affect your willingness to seek HIV-TB care?", "How did your family or community respond when they knew about your condition?", "What did you feel when you experienced stigma in health-care services?", and "How did you cope with that experience?" Follow-up probes explored how stigma was experienced in personal, family, community, and health-care contexts. Each interview lasted approximately 60-90 minutes and was audio-recorded with the participants' consent and supplemented by detailed field notes capturing contextual information and nonverbal expressions.

Interviews were conducted by the first author, who had undergone training and had experience in qualitative and community health research. Before each interview, the researcher engaged in reflexive bracketing by identifying and setting aside personal assumptions and preconceptions related to HIV-TB and stigma. During the interviews, the researcher practiced openness by encouraging the participants to express their experiences freely and listening without judgment. Data collection and preliminary analysis occurred concurrently, allowing for iterative refinement of interview questions and deeper exploration of emerging insights. Recruitment and interviews continued until data saturation was achieved, when the 16 interviews had generated deep, rich, relevant, and abstract data, and no new themes or meanings related to the essence of the phenomenon emerged.

Data were analyzed manually using Colaizzi's seven-step descriptive phenomenological method.[26] First, all interviews were transcribed verbatim and read repeatedly to achieve immersion in the data. Second, significant statements related to stigma in HIV-TB care were identified from each transcript. Third, formulated meanings were developed from these significant statements while remaining close to the participants' original accounts. Fourth, similar formulated meanings were compared, grouped, and organized into theme clusters that represented shared patterns of stigma experiences. Fifth, these theme clusters were integrated into an exhaustive description of the phenomenon, which explained how stigma was experienced across personal, family, community, and health-care contexts. Sixth, the exhaustive description was reduced into the fundamental structure of the phenomenon, resulting in the final overarching subthemes and themes. Seventh, the findings were returned to five selected participants for validation, and they confirmed that the themes reflected their lived experiences of stigma related to HIV-TB.

The research team consisted of researchers with expertise in phenomenology, community nursing, and qualitative research. Throughout the analytic process, the team engaged in reflexive dialogue to critically examine interpretations and ensure that the findings were grounded in the participants' narratives rather than researchers' expectations.

The trustworthiness of the study was ensured based on the criteria proposed by Lincoln and Guba, including credibility, dependability, confirmability, and transferability.[27] Credibility was enhanced through prolonged engagement with the data, member checking, and triangulation using interview transcripts and field notes. Dependability was supported by consistent application of Colaizzi's analytic steps and by maintaining a detailed audit trail of methodological decisions. Confirmability was strengthened through reflexive memoing and documentation of analytic processes, ensuring that the findings were derived from the participants' accounts. Transferability was facilitated by providing rich, thick descriptions of the study context, participants' characteristics, and care settings to enable readers to assess applicability to other contexts.

Ethical approval for this study was obtained from the Health Research Ethics Committee, Faculty of Nursing, Universitas Indonesia (No. KET-251/UN2.F12.D1.2.1/PPM.00.02/2025). Prior to participation, all study procedures, potential emotional discomfort, voluntary participation, confidentiality, privacy protection, and the right to withdraw at any time without consequences were clearly explained to the participants. Written informed consent was obtained before participation, and verbal consent was reconfirmed immediately before audio-recording each interview. To protect anonymity, we identified the participants using codes, and all interview data were stored securely, being accessible only to the research team.

Results

Participants ranged in age from 23 to 45 years, with a mean of 32.60±6.30 years. Most participants were identified as male (n=13), while three were transgender women. In terms of key population status, the majority were MSM (n=13), and the remaining three were transgender women. All participants were living with HIV-TB coinfection. The duration of HIV diagnosis ranged from 1 to 15 years, with an average duration of 6.60±3.90 years. Regarding TB treatment status, nine participants were still undergoing treatment, whereas seven had completed treatment. Employment status varied, including informal workers (n=5), private employees (n=4), unemployed participants (n=3), students (n=2), and sex workers (n=2).

Table 1: Demographic Characteristics of the Participants (n=16)

Participant	Age	Gender Identity	Key Population	HIV-TB[a] Status	Duration of HIV[b] Diagnosis (years)	TB[c] Treatment Status	Employment Status	Living Arrangement
P1	27	Male	MSM[d]	HIV-TB	3	Ongoing	Informal worker	With friends
P2	32	Male	MSM	HIV-TB	6	Completed	Unemployed	Alone
P3	29	Male	MSM	HIV-TB	4	Ongoing	Private employee	With partner
P4	35	Male	MSM	HIV-TB	8	Completed	Informal worker	With family
P5	24	Male	MSM	HIV-TB	2	Ongoing	Student	With friends
P6	38	Male	MSM	HIV-TB	10	Completed	Unemployed	Alone
P7	31	Male	MSM	HIV-TB	5	Ongoing	Private employee	With partner
P8	41	Male	MSM	HIV-TB	12	Completed	Informal worker	With family
P9	26	Transgender	Transgender woman	HIV-TB	3	Ongoing	Sex worker	Alone
P10	34	Transgender	Transgender woman	HIV-TB	7	Completed	Informal worker	With friends
P11	28	Male	MSM	HIV-TB	4	Ongoing	Private employee	With family
P12	45	Male	MSM	HIV-TB	15	Completed	Unemployed	Alone
P13	36	Male	MSM	HIV-TB	9	Ongoing	Informal worker	With partner
P14	23	Male	MSM	HIV-TB	1	Ongoing	Student	With family
P15	39	Transgender	Transgender woman	HIV-TB	11	Completed	Sex worker	Alone
P16	33	Male	MSM	HIV-TB	6	Ongoing	Private employee	With friends

[a]HIV-TB: Human immunodeficiency virus–tuberculosis coinfection; [b]HIV: Human immunodeficiency virus; [c]TB:Tubercluosis; [d]MSM: Men who have Sex with Men

Table 2: Subthemes and themes identified in the study

Subthemes	Themes
Internalized stigma related to HIV-TB diagnosis Stigma from family and community Anticipated stigma and fear of disclosure Moral judgment linked to social norms	Multidimensional stigma surrounding patients with HIV-TB
Discriminatory health service procedures Fragmented HIV-TB services Avoidance of healthcare services	Stigma as a barrier to HIV-TB care
Emotional resilience and self-acceptance Seeking peer and social support Selective disclosure strategies Meaning-making and hope	Psychosocial resilience and adaptive coping among patients with HIV-TB

In terms of living arrangements, five participants lived alone, four lived with friends, four lived with family, and three lived with partners. Table 1 presents the demographic and clinical characteristics of the 16 participants included in this study.

The analysis identified 11 subthemes, which were further organized into 3 overarching themes. These themes were Multidimensional Stigma Surrounding Patients with HIV-TB, Stigma as a Barrier to HIV-TB Care, and Psychosocial Resilience and Adaptive Coping among Patients with HIV-TB. A summary of the themes and subthemes is presented in Table 2.

1. Multidimensional Stigma Surrounding the Patients with HIV-TB

This theme describes the participants' lived experiences of stigma following their HIV-TB diagnosis, encompassing emotional responses, social interactions, and moral judgments encountered in everyday life. Participants' narratives reflected how stigma was experienced internally and externally, shaping self-perceptions, relationships with others, and daily social engagement.

1.a. Internalized Stigma Related to HIV-TB Diagnosis

Internalized stigma emerged as a profound emotional response immediately following diagnosis. The participants described feelings of shame, self-blame, and a diminished sense of self-worth, which influenced how they perceived themselves and interacted with others. They reported questioning their value and withdrawing from social interactions. A participant stated:

"When I was diagnosed with HIV and TB, I felt deeply ashamed and kept blaming myself. I felt different from others and started to lose my confidence in social situations." (P1)

Another participant explained:

"After knowing my diagnosis, I felt dirty and unworthy. I questioned myself every day and felt that my life value had decreased." (P2)

Similar experiences were expressed by others:

"I kept asking myself what mistake I had made. I felt that people would judge me even if they did not know my status." (P3)

"My diagnosis made me feel small and powerless. I avoided meeting people because I felt I was no longer the same person." (P4)

1.b. Stigma from Family and Community

Participants described experiencing stigma from family members and the wider community after their HIV-TB status became known. These experiences included rejection, social distancing, gossip, and exclusion, which contributed to feelings of isolation and marginalization. One participant said:

"After my family found out, they started keeping their distance. I felt rejected and no longer treated as part of the family." (P5)

Others reported similar experiences within their communities:

"People in my neighborhood talked about me behind my back. I felt labeled and avoided in social gatherings." (P6)

"I noticed that community members no longer interacted with me as before, and this made me feel isolated." (P7)

"They treated me like I was dangerous and could infect others just by being around them." (P8)

1.c. Anticipated Stigma and Fear of Disclosure

Anticipated stigma strongly influenced the participants' decisions regarding disclosure of their HIV-TB status. Participants described fear of rejection, job loss, and harassment, which caused them to conceal their condition and limit social interactions. A participant stated:

"*I was afraid to tell anyone about my condition because I thought I would lose my job and be rejected*." *(P9)*

Others described deliberate concealment as a protective strategy to avoid potential discrimination and negative social consequences. One participant explained:

"*I chose to stay silent and hide my illness to protect myself from discrimination. I felt that once people knew about my condition, they would see me differently and start judging me. Keeping it secret felt like the only way to stay safe and continue my daily life without problems*." *(P10)*

Another participant described withdrawing from social life due to fear of being questioned about their health status:

"*I avoided social activities because I was afraid people would start asking questions. When they ask why I look thin or why I often go to the clinic, I don't know how to answer. To avoid suspicion and uncomfortable conversations, I chose to stay away from gatherings*." *(P11)*

Similarly, fear of verbal abuse and negative treatment shaped the participants' decisions to conceal their HIV-TB status:

"*I was scared that if people knew, they would insult me or treat me badly. I imagined being talked about, laughed at, or blamed. Because of that fear, I kept everything to myself and tried not to let anyone know about my illness*." *(P12)*

1.d. Moral Judgment Linked to Social Norms

Participants perceived that their HIV-TB condition was frequently judged through moral and religious lenses rather than understood as a health issue. These moral judgments intensified feelings of blame and condemnation. They expressed:

"People judged my illness as a moral failure rather than a health problem. They did not ask how I was feeling or what treatment I needed. Instead, they assumed that I must have done something wrong, and that judgment made me feel ashamed and powerless." (P13)

Another participant described how moral interpretations framed HIV-TB as punishment, deepening emotional suffering:

"Some said that this disease was a punishment, and that made me feel condemned. Hearing those words hurt me deeply because it felt like I was being punished not only by the illness but also by people's beliefs." (P14)

Participants also described being labeled without being given the opportunity to explain their experiences:

"I felt people had already decided who I was without listening to my story. They judged me based on rumors and assumptions, not knowing what I had been through or how hard I was trying to survive." (P15)

Similarly, another participant emphasized how moral judgment replaced compassion within social interactions:

"They did not see me as a patient who needed care, but as someone who deserved blame. Instead of support, I felt accused, and that made me want to stay away from people and keep my condition hidden." (P16)

2. Stigma as a Barrier to HIV-TB Care

This theme reflects how stigma functioned as a barrier to accessing and continuing HIV-TB care. Participants described how

stigmatizing experiences within health services affected their willingness to engage with care.

2.a. Discriminatory Health Service Procedures

Participants reported experiencing discriminatory procedures within health-care settings that made them feel visibly labeled as patients with HIV-TB. One participant explained:

"When I arrived at the clinic, my medical record was separated from other patients. I was asked to wait longer, and the nurse spoke to me in a lower voice, as if my condition should not be heard by others." (P5)

Another participant added:

"The service process felt unequal. I noticed that other patients were called first, while I was repeatedly asked to sit and wait." (P6)

2.b. Fragmented HIV-TB Services

Participants described challenges related to fragmented HIV-TB services that required them to navigate multiple facilities, increasing emotional burden and fear of disclosure. Participants stated:

"I had to visit different clinics for HIV and TB services. Each place felt separate, and every time I went to a new clinic, I was afraid that people would start asking questions about my condition. It made me tired and anxious because I had to explain myself again and again." (P11)

Another participant described how the lack of service integration complicated treatment and increased emotional strain:

"The lack of integrated services made treatment difficult. Going to different clinics took more time and energy, and I was always worried that someone might recognize me or find out about my illness. Sometimes it felt overwhelming, and I wondered if continuing treatment was worth all the stress." (P12)

2.c. Avoidance of Health-Care Services

Negative experiences and fear of stigma caused some participants to delay or avoid seeking care. A participant said:

"Because of previous negative experiences, I delayed coming back for follow-up visits. Every time I thought about returning to the clinic, I remembered how uncomfortable I felt before, and that made me hesitate even when I knew I needed treatment." (P13)

Another participant shared how fear and emotional burden influenced the decision to avoid care despite worsening symptoms:

"I sometimes chose not to seek care, even when symptoms have worsened. I felt afraid of being judged again, and that fear made me ignore my health for a while, even though I knew it could be dangerous." (P14)

3. Psychosocial Resilience and Adaptive Coping among Patients with HIV-TB

This theme highlights how participants coped with stigma and sustained engagement in HIV-TB care despite ongoing challenges.

3.a. Emotional Resilience and Self-Acceptance

Participants described developing emotional resilience and gradually accepting their condition over time. Participants stated:

"Over time, I learned to accept my condition. At first it was very difficult, but slowly I realized that I could not keep hating myself. Acceptance helped me to continue living and taking my treatment seriously." (P15)

Another participant emphasized the role of acceptance in emotional survival:

"Acceptance helped me survive. When I stopped blaming myself, I felt stronger emotionally and more willing to face each day, even with all the challenges." (P16)

3.b. Seeking Peer and Social Support

Peer and community support played an important role in helping participants cope with stigma. A participant said:

"Meeting others with similar experiences made me feel understood. I realized that I was not alone, and that feeling gave me comfort and courage to continue my treatment." (P1)

Another participant highlighted the emotional strength gained through peer support groups:

"Peer support groups gave me strength. Listening to others' stories and sharing my own made me feel supported and less afraid of my condition." (P2)

3.c. Selective Disclosure Strategies

Participants described carefully managing disclosure of their HIV-TB status as a strategy to protect themselves from stigma. A participant reported:

"I became very careful about who I told about my status. I learned from experience that not everyone could accept it, so I chose to share only with people I trusted." (P3)

Another participant described disclosure as an ongoing and emotionally demanding process:

"Managing disclosure felt like a daily negotiation between honesty and self-protection. I wanted to be honest, but I also needed to protect myself from being hurt." (P4)

3.d. Meaning-Making and Hope

Participants described reframing their illness experiences and maintaining hope despite stigma. One of the participants stated:

"I tried to see my illness as a lesson rather than a punishment. Thinking this way helped me stay calm and not feel angry all the time." (P5)

Another participant described finding meaning through survival and advocacy:

"Despite stigma, I found meaning in surviving and helping others understand HIV-TB better. It gave me hope that my experience could be useful for someone else." (P6)

Discussion

This study aimed to explore the lived experiences of stigma among people living with HIV-TB in Indonesia. The findings provide new insight by showing that stigma in HIV-TB care is not experienced as a single disease-related label, but as a layered phenomenon shaped by HIV-TB co-infection, key population identity, family and community judgment, and health-care encounters. This study differs from previous research that has commonly examined HIV stigma or TB stigma separately by demonstrating how compounded stigma shapes self-perception, disclosure, emotional well-being, and experiences within care settings.

Stigma in HIV-TB care emerged in this study as more than an emotional reaction to diagnosis; it functioned as a continuing social process that penetrated self-perception, daily interaction, and care engagement. Shame, self-blame, and diminished self-worth should, therefore, be interpreted not only as individual psychological responses but also as consequences of living with a dual diagnosis within already stigmatized social positions.[28] This study is supported by recent evidence showing that HIV- and TB-related stigma can accumulate over time and reshape how people understand themselves and their social worth.[29] Internalized stigma has also been linked to poorer psychological well-being, withdrawal, and depression among people living with HIV.[30] Taken together, these findings suggest that HIV-TB care cannot remain narrowly biomedical; it requires holistic nursing responses that treat emotional suffering, threatened identity, and social marginalization as central components of care rather than secondary consequences of disease.[31]

A further challenge raised by this study is that stigma was reproduced within health-care delivery itself through labeling practices, unequal encounters, and fragmented service pathways. This point is important because it questions the assumption that service integration alone is sufficient to make care accessible and safe. Research on structural stigma has shown that stigma is often embedded in institutional procedures, norms, and power relations, not only in openly discriminatory attitudes.[15] Evidence from India likewise demonstrates that stigma and discrimination by health-care providers remain a tangible barrier for people affected by HIV and TB.[32] In this context,

the problem is not merely whether services exist, but whether they are experienced as confidential, respectful, and non-judgmental by marginalized patients. For nursing practice, this means that improving HIV-TB care requires more than referral efficiency; it also requires reflective communication, protection against involuntary disclosure, and routine service redesign that reduces symbolic and procedural marking of patients.[16]

However, these findings differ from the studies reporting that integrated or community-based HIV and TB services can reduce access barriers by bringing care closer to marginalized populations and improving service continuity. For example, recent community-based integrated HIV service trials and implementation studies have shown that integrated or community-delivered care can improve uptake, continuity, and accessibility of HIV-related services among underserved groups.[21, 33] This difference may be explained by the fact that service availability does not automatically eliminate stigma when patients still perceive risks of disclosure, moral judgment, or unequal treatment during care encounters. Recent studies on TB stigma and HIV-TB-related discrimination indicate that stigma remains a barrier to timely care-seeking, treatment engagement, and patient well-being, including when stigma occurs within health-care interactions.[32, 34] In this study, the problem was not only whether HIV-TB services were available, but whether these services were experienced as safe, confidential, and non-judgmental by key populations living with HIV-TB.

Resilience in this study should also be read critically. Self-acceptance, selective disclosure, and peer support were clearly important resources, yet they should not be romanticized as evidence that individuals can simply overcome stigma through personal strength.[35] Recent literature indicates that peer support can improve psychosocial well-being, reduce isolation, and strengthen engagement in HIV care, while resilience and social support can buffer the harmful effects of stigma-related stress.[36] Even so, reliance on individual coping alone risks shifting responsibility away from services and systems that continue to produce stigma. The value of resilience, therefore, lies not in replacing structural change but in showing what patients mobilize in order to survive within imperfect care environments.[37] This interpretation reinforces the need for HIV-TB programs that formally incorporate peer support and socially responsive nursing care rather than leaving coping work to patients themselves.[38]

These findings carry clear implications for community-oriented nursing and nurse-led HIV-TB services. Community and primary care nurses need preparation that goes beyond technical management of co-infection and includes stigma literacy, reflective practice, confidentiality protection, and nonjudgmental communication for key populations.[32] The present findings also suggest that nurse-led programs should be designed not only to sustain treatment adherence but also to create emotionally safe care spaces in which patients are less fearful of exposure, blame, and unequal treatment.[39] Collaboration with peer networks and community organizations is particularly important because stigma extends beyond the clinic into families, neighborhoods, and social identity.[15, 40] A realistic response, therefore, is not to expect patients to adapt to stigmatizing systems, but to reorganize care so that continuity, dignity, and trust become routine features of HIV-TB service delivery for marginalized populations.[10]

This study has several strengths and limitations. A key strength of this study is its in-depth phenomenological exploration of stigma among people living with HIV-TB within community-based care settings in Indonesia. The study also provides rich descriptions of how stigma is experienced across personal, family, community, and health-care contexts. However, several limitations and implementation challenges

should be acknowledged. Because the study involved a sensitive topic among people living with HIV-TB, recruitment required careful trust-building, confidentiality assurance, and coordination with community-based organizations and health-care providers. Some potential participants were hesitant to participate due to fear of disclosure and stigma, which may have limited access to individuals with more hidden or severe stigma experiences. Therefore, the findings should be interpreted within the context of these methodological and implementation limitations.

Conclusion

This study highlights that stigma remains a major challenge in HIV-TB care among people living with HIV-TB in Indonesia. Stigma affects emotional well-being, disclosure, and continuity of care across personal, interpersonal, and health-service levels. Participants also demonstrated resilience through self-acceptance, peer support, selective disclosure, and hope. These findings emphasize the need for stigma-sensitive, respectful, and community-oriented nursing care. Strengthening nurse-led and community-based HIV-TB services is essential to build trust, protect confidentiality, and support sustained engagement in care. Future studies are recommended to develop stigma-reduction interventions within nurse-led and community-based HIV-TB care models among people living with HIV-TB.

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Authors' Contribution

IA, AW, and MAA contributed to the study conception and design, data collection, data analysis, and manuscript drafting. AYN, NA, and US provided critical input on study design, analytical rigor, and interpretation of findings. IA and MAA contributed to manuscript refinement. AW, US, and AYN supervised the research process and contributed to critical revision of the manuscript. All authors critically reviewed, revised the manuscript, and approved the final version for publication. All authors take responsibility for the integrity of the data and the accuracy of the data analysis. The corresponding author attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted.

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Conflicts of Interest

None declared.

Declaration on AI

The authors did not employ artificial intelligence (AI)-assisted technologies in this manuscript.

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