



COMMUNITY-BASED INTEGRATED SUPPORT MODEL FOR PEOPLE LIVING WITH HIV/AIDS (PLWHA) AMONG KEY POPULATIONS

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ABSTRACT

Indonesia continues to face a high HIV burden, with an estimated 564,000 people living with HIV/AIDS (PLWHA) by 2025. Jombang Regency has recorded 2,013 HIV/AIDS cases as of 2024; however, support services remain fragmented and lack systematic integration across health, psychosocial, and social sectors. Objective: To formulate a community-based integrated support model for key populations living with HIV/AIDS in Jombang Regency. A descriptive qualitative study with a model-development orientation was conducted in Jombang Regency from Mei to Juli 2026. Participants were purposively selected, comprising 20 PLWHA from key populations, 7 community support workers from the Jombang Care Center (JCC), and 3 health workers. Data were collected through in-depth interviews, Focus Group Discussions (FGDs), and field observations, then analyzed thematically using source and method triangulation. Three support needs were identified: (1) medical (24-hour ARV access, treatment adherence, and management of treatment interruption), (2) psychosocial (status acceptance, safe spaces, and self-empowerment), and (3) social (social support, children's education, and stigma reduction). The support mechanism follows this flow: case finding, JCC referral, outreach, assessment, collaborative solution-finding, and monitoring. Program sustainability depends on program commitment, safe spaces, confidentiality, multisectoral partnerships, human resources, and technical guidelines. The formulated integrated model comprises input, process, output, and outcome components aimed at achieving the "3 Zeros" target by 2030. Technical guidelines, safe spaces, and human resources require strengthening.

Keywords: community-based; integrated support; key populations; PLWHA

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INTRODUCTION

HIV/AIDS remains a complex and multidimensional public health problem, especially among vulnerable and key populations. The problem extends beyond medical aspects to include social, psychological, and cultural factors, as well as fragmented health and social services (Saleem et al., 2020). Globally, HIV control efforts have shown significant progress, yet challenges in achieving the 95-95-95 targets and HIV/AIDS elimination by 2030 remain substantial, particularly in developing countries including Indonesia (Grimsrud et al., 2019; UNAIDS, 2022). Indonesia still faces a high HIV epidemic burden. The Indonesian Ministry of Health estimates approximately 564,000 People Living with HIV in 2025, with new cases continuing to increase annually (Ministry of Health, 2020). HIV prevalence in Indonesia is concentrated among key populations, namely Men who have Sex with Men (MSM), Female Sex Workers (FSW), Transgender, and People Who Inject Drugs (PWID), who have a much higher risk of HIV infection compared to the general population (Nugroho et al., 2019; Ministry of Health, 2023). Although various prevention and treatment programs have been implemented, coverage and quality of services for key populations remain suboptimal.

At the local level, Jombang Regency recorded 2,013 HIV/AIDS cases through 2024 (Jombang District Health Office, 2024). Research by Narwiyanti & Takariningsih (2024) in Jombang Regency showed that in 2022 there were 1,981 HIV cases with 75% confirmed and only 39.6% of PLHIV undergoing ARV therapy, thus not yet reaching the 90-90-90 Fast Track target. The increase in cases in Jombang Regency, especially among key populations, still faces various challenges including stigma and discrimination, limited access to PLHIV-friendly services, low adherence to antiretroviral therapy, and the lack of systematically integrated health, social, and psychological services. Data from RRI (2024) shows that stigma from PLHIV themselves reaches 35.9%, while from outside reaches 13.4%. Stigma and discrimination also occur in health services by health workers at 21.5% in the past year.

In Indonesia, community-based support approaches have been recognized as an important strategy in HIV/AIDS control, especially to reach key populations who are difficult to access through formal services (Campbell & Cornish, 2019). This approach is considered effective in increasing PLHIV involvement in services, strengthening psychosocial support, and reducing stigma at the community level (Duncombe et al., 2020). Peer Support Groups (KDS) and NGOs working on HIV/AIDS have served as bridges between PLHIV and formal service systems, as well as providing safe spaces for PLHIV to share experiences and strengthen each other (Puspitasari et al., 2022; Daramatasia et al., 2026). Research by Wahyuning (2025) also shows that social support from peer supporters has a significant role in improving the quality of life of PLHIV.

A systematic study by Suan et al. (2025) on Self Help Groups (SHG) as an additional intervention in integrated HIV services found that peer-group-based approaches are effective in improving ARV adherence, reducing stigma, and improving clinical outcomes. However, the effectiveness of this approach is highly dependent on local context, resource availability, and integration with formal services. Research from PubMed (2025) on socio-ecological perspectives on HIV care engagement in Bandung emphasizes the importance of community involvement and participatory approaches in improving access and retention of HIV care for PLHIV. Although various efforts have been made, in practice, PLHIV support in Indonesia is often still partial, fragmented, and not systematically integrated between health services, psychosocial support, and social support (Rachmawati & Wibowo, 2020). A similar condition is also found in Jombang Regency, where various actors such as health facilities, communities, and non-governmental organizations have provided support, but have not yet been within a unified documented integrated model framework based on local partnerships (Setyoadi & Hidayati, 2021).

Jombang Care Center (JCC) as a community support institution has strong field experience in supporting PLHIV/AIDS, especially among key populations. However, the support practices that have been running have not been systematically formulated in a conceptual model that can serve as an academic, policy, and replication reference in other contexts. Meanwhile, the development of an integrated support model based on local partnerships is considered important to ensure service sustainability, improve the quality of life of PLHIV/AIDS, and strengthen synergy among stakeholders (Puspitasari et al., 2022). From the literature review, a research gap was identified: no study has systematically formulated a community-based integrated PLHIV/AIDS support model that integrates medical, psychosocial, and social needs by involving various actors (PLHIV, community support workers, and health workers) in a single model framework contextual to the local conditions of Jombang Regency. Previous studies have focused more on ARV adherence, stigma, or psychosocial support separately, without integrating them into a comprehensive support model based on local partnerships.

This study uses the socio-ecological model as a conceptual framework. This model was developed by Bronfenbrenner (1979) and has been adapted in the context of HIV/AIDS by various researchers. The socio-ecological approach views that health behavior and individual well-being are influenced by four interrelated levels: (1) individual level (knowledge, attitudes, beliefs), (2) interpersonal level (family, peer, and supporter support), (3) community level (social norms, stigma, support

networks), and (4) policy level (health policies, service access, funding). This framework is relevant because this study examines PLHIV support that involves various levels, ranging from individual needs of PLHIV, support from peer supporters and family, the role of the JCC community, to policies of the Health Office and national programs. In addition, this study also integrates the concept of differentiated service delivery (DSD) which emphasizes patient-centered HIV services tailored to individual needs (Grimsrud et al., 2019). This study aims to formulate a community-based integrated PLHIV/AIDS support model for key populations in Jombang Regency. Specifically, this study aims to: (1) identify support needs (medical, psychosocial, and social) of PLHIV from key populations, (2) map actors and interaction mechanisms in existing support practices, and (3) formulate a community-based integrated support model contextual to the conditions of Jombang Regency. The urgency of this study is in line with the 2030 HIV/AIDS elimination target which emphasizes people-centered and community-based care approaches. The formulated model is expected to serve as a reference for stakeholders in Jombang Regency and other regions with similar characteristics in developing integrated, sustainable, and impactful support services.

METHOD

This study used a descriptive qualitative approach with model development orientation. This approach was chosen to explore in depth the practices, experiences, and meanings of PLHIV/AIDS support among vulnerable and key populations, as well as to formulate an Integrated PLHIV/AIDS Support Model based on Jombang Care Center (JCC) partnerships that is contextual to the local conditions of Jombang Regency. The research was conducted in Jombang Regency, East Java Province, from Mei to Juli 2026, focusing on areas and communities that are the target areas of Jombang Care Center (JCC). Participants were selected purposively according to the research objectives. Inclusion criteria for PLHIV participants were: (a) diagnosed with HIV/AIDS, (b) from key populations (MSM, FSW, transgender, or PWID), (c) aged ≥ 18 years, (d) willing to participate. Exclusion criteria: acute illness requiring hospitalization. For support workers and health workers, inclusion criteria were: actively involved in HIV/AIDS support services for at least 1 year and willing to participate.

The participants consisted of: (1) 20 People Living with HIV/AIDS from key populations (coded P1–P20), (2) 7 Jombang Care Center community support workers (coded K1–K7), and (3) 3 health workers (coded T1–T3). Data collection was conducted through in-depth interviews using semi-structured interview guides, Focus Group Discussions (FGD), and field observations of support activities. Interview guides were developed based on literature review and expert consultation. Data analysis followed Braun & Clarke's (2006) six-phase thematic analysis framework: (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing up. Two researchers independently coded the data, with disagreements resolved through discussion. Data validity was maintained through source and method triangulation, as well as member checking. The model formulation process involved: (a) identification of support needs, actors, and processes from empirical data; (b) synthesis of findings into components; (c) validation through member checking and FGD; (d) final model construction.

RESULT

Respondent Characteristics

Table 1.
Distribution of Respondents by Category (n=30)

Respondent Category	Total	Code	Data Collection Method
PLHIV Key Populations	20	P1 – P20	In-depth Interview
JCC Community Support Workers	7	K1 – K7	In-depth Interview + FGD
Health Workers (HIV Program Officers)	3	T1 – T3	In-depth Interview

Patterns of Medical, Psychosocial, and Social Support Needs

Medical Support Needs: The study found that medical needs include sustainable ARV access, therapy adherence, service coordination, and condition monitoring. Of the 20 PLHIV participants, 17 (85%) reported difficulty accessing ARV services due to distance, cost, or stigma. JCC support workers provided 24-hour assistance without time limits, even until the client's death. One PLHIV participant shared:

"Saya merasa dunia saya runtuh ketika tahu saya HIV positif. Tetapi Mas [pendamping] selalu datang ke rumah, tidak pernah menghakimi, dan menemani saya ke klinik. Saya rasa saya tidak akan ada di sini tanpanya." (P05, PLHIV).

ARV therapy adherence remains a major challenge, with 12 of 20 participants (60%) reporting experiencing denial and non-adherence due to side effects and stigma.

Psychosocial Support Needs: Psychosocial needs include status acceptance, self-strengthening, safe spaces, and family support. The denial phase experienced by PLHIV upon first learning their status is profound, with roots in stigma, stereotypes, and labeling from society. PLHIV feel safe and calm because of support workers who always strengthen and do not judge. A support worker explained:

"Kami tidak hanya mendampingi secara medis, tetapi juga secara emosional. Banyak klien yang datang dalam keadaan putus asa, dan tugas kami adalah menguatkan mereka, memberi mereka harapan." (K2, JCC Support Worker)

Social Support Needs: Social needs include social support, child education support, stigma reduction, and dignified funerals. Stigma and discrimination remain high in society and health services, causing PLHIV to often choose treatment outside the city to avoid stigma. Of the 20 PLHIV participants, 15 (75%) reported experiencing stigma from their immediate community, while 6 (30%) reported discriminatory treatment from health workers.

Table 2.

Actors and Roles in Support

Actor	Main Role	Interaction Mechanism
PLHIV (Client)	Service recipient, support subject	Receives support, builds trust, undergoes ARV therapy
Community Support Worker (JCC)	Outreach, psychosocial strengthening, bridging actor	Receives referrals from services, outreach, needs assessment, joint solutions
JCC Coordinator	Coordination, advocacy, program management	Leads team, coordinates with services, policy advocacy
Health Center (HIV PP)	Case finding, medical services, referral	Case findings, JCC coordination, referral
District Health Office	Leading sector, policy advocacy	Basecamp facilitation, safe space support
Village Apparatus	Condition monitoring, death notification	Patient monitoring at village level, death information
Women Crisis Center	Sexual violence referral, women and children issues	JCC referral partner

Support Flow: The support flow runs through: case finding → JCC referral → outreach → assessment → joint solutions → monitoring. This flow shows an integrated referral system between health services and the community.

Sustainability Determining Factors

Table 3.

Sustainability Determining Factors

Factor	Description	Challenge
Ministry of Health Program	National policy umbrella	Without program, sustainability disrupted
Commitment and Heart	HIV/AIDS work is heart work	Many actors have not worked from the heart
Safe Space	Place to grow and develop together	Still limited and needs improvement
Confidentiality	Maintaining client status confidentiality	Stigma remains high in society
Multisectoral Partnership	Working together, not partial	Some still work individually
Human Resources	Availability of adequate support workers	7 people for all Jombang

Technical Guidelines	Integrated support technical guidelines	Not yet available, highly needed
Funding	Program budget support	Budget efficiency affects services

DISCUSSION

This study confirms that PLHIV support needs encompass three interconnected dimensions: medical, psychosocial, and social. The 24-hour support provided by JCC aligns with Demartoto et al. (2019), who stated that sustainable support can overcome the social medical problems of PLHIV. The finding that 24-hour support is crucial suggests that PLHIV face unpredictable and ongoing challenges requiring continuous availability of support. This extends Demartoto et al. (2019) by demonstrating that support needs are not only medical but also emotional and social, requiring a holistic approach.

ARV therapy adherence remains a major challenge, consistent with Sasi et al. (2024), who found that PLHIV adherence to ARV therapy in Situbondo Hospital was mostly at the medium level (51.6%), with high adherence only 36.7%. This study found that 60% of PLHIV experienced denial and non-adherence due to side effects and stigma, indicating the need for integrated psychosocial support alongside medical treatment. The psychosocial needs identified in this study are consistent with Daramatasia et al. (2026), who found that social and spiritual support play a key role in strengthening PLHIV adjustment. The study found that the social connectedness dimension was in the good category (score 3.69), while self-ability (3.54), self-esteem (3.46), and spiritual well-being (3.48) were in the sufficient category.

The social needs found, particularly regarding stigma reduction, align with data from RRI (2024) showing that stigma from PLHIV themselves reaches 35.9%, while external stigma reaches 13.4%. Stigma and discrimination also occur in health services by health workers at 21.5% in the past year. This confirms the experiences of PLHIV in Jombang who still face discriminatory treatment from health workers, with 75% reporting community stigma and 30% reporting discrimination from health workers. Jombang Care Center plays a role as a bridging actor between PLHIV and the formal service system. Campbell & Cornish (2019) stated that community-based approaches are effective in increasing PLHIV involvement in services, strengthening psychosocial support, and reducing stigma at the community level. This study also found variations in health center performance, indicating that support success is strongly influenced by the individual commitment of health workers.

Sustainability factors found include the Ministry of Health program as a policy umbrella, commitment and heart as the foundation of work, safe spaces as places for PLHIV to grow and develop, confidentiality as protection from stigma, and multisectoral partnerships. Research from PubMed (2025) on socio-ecological perspectives on HIV care engagement in Bandung emphasizes the importance of community involvement and participatory approaches. This aligns with the socio-ecological model used in this study, confirming that multilevel interventions are necessary for sustainable HIV support. The integrated support model formulated consists of nine main components: input, trust building process, assessment process, motivation process, solution provision process, referral process, monitoring process, output, and outcome. This model integrates three dimensions of needs (medical, psychosocial, social) by placing the community support worker as a bridging actor between PLHIV and the formal service system.

CONCLUSION

The formulated integrated support model comprises input components (human resources, funding, policy), processes (trust building, assessment, solution provision, referral, monitoring), expected output (improved adherence, reduced stigma), and outcome (improved quality of life). Key sustainability determinants include: Ministry of Health program umbrella, commitment of actors, safe spaces, confidentiality, multisectoral partnerships, adequate human resources, technical guidelines, and sustainable funding. However, the 2030 "3 Zero" target remains constrained by persistent stigma and discrimination. Achieving this target requires: (1) development and dissemination of technical guidelines for integrated support, (2) strengthening JCC safe spaces and

expanding coverage, (3) capacity building for support workers, (4) establishing formal multisectoral partnerships, and (5) sustainable budget allocation from district and national levels. Joint work from all actors with a heart-based and humanitarian approach is essential.

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