

## A SYSTEMATIC REVIEW OF PEER SUPPORT FOR MENTAL HEALTH IN PEOPLE LIVING WITH HIV

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### INFO ARTIKEL

**Riwayat Artikel:**

Received : 25-04-2025

Revised : 20-05-2025

Accepted : 30-05-2025

**Keywords:** Peer Support, Mental Health, Hiv

**Kata Kunci:** Dukungan Sebaya, Kesehatan Mental, Hiv

**DOI:** 10.62335

### ABSTRACT

*Bacground: HIV remains a global challenge with millions of new cases each year. In Indonesia, cases continue to rise, particularly among individuals in their productive years. Beyond medical challenges, stigma and mental health issues significantly impact the quality of life and treatment adherence of people living with HIV (PLHIV). Peer support has proven effective in reducing stigma, enhancing coping mechanisms, and motivating treatment adherence while fostering an inclusive environment. Methods: This systematic review was conducted following the PRISMA guidelines. Articles were sourced from databases such as Google Scholar, PubMed, and ScienceDirect using keywords like "peer support," "mental health," and "HIV." Out of 33,181 identified articles, 9 met the inclusion criteria and were further analyzed. Result: The results of this systematic review encompass several key aspects identified in the studies, including respondent characteristics, the effects of peer support on mental health, the role of stigma, as well as implications for quality of life, communication competence, and support for adolescents living with HIV Conclusion: Peer support is effective in improving the mental health and quality of life of people living with HIV (PLHIV) by reducing depression, anxiety, and stress, while also strengthening coping mechanisms. However, stigma remains a significant barrier, particularly among high-risk groups such as MSM. Integrating peer support with stigma reduction programs and mental health services is highly recommended to enhance the well-being of*

*PLHIV..*

## **ABSTRAK**

Latar Belakang: HIV masih menjadi tantangan global dengan jutaan kasus baru setiap tahunnya. Di Indonesia, kasus terus meningkat, terutama di kalangan individu yang berusia produktif. Selain tantangan medis, stigma dan masalah kesehatan mental berdampak signifikan terhadap kualitas hidup dan kepatuhan pengobatan orang yang hidup dengan HIV (ODHA). Dukungan sebaya telah terbukti efektif dalam mengurangi stigma, meningkatkan mekanisme penanganan, dan memotivasi kepatuhan pengobatan sekaligus mendorong terciptanya lingkungan yang inklusif. Metode: Tinjauan sistematis ini dilakukan dengan mengikuti pedoman PRISMA. Artikel bersumber dari basis data seperti Google Scholar, PubMed, dan ScienceDirect menggunakan kata kunci seperti "dukungan sebaya," "kesehatan mental," dan "HIV." Dari 33.181 artikel yang diidentifikasi, 9 memenuhi kriteria inklusi dan dianalisis lebih lanjut. Hasil: Hasil tinjauan sistematis ini mencakup beberapa aspek utama yang diidentifikasi dalam penelitian, termasuk karakteristik responden, dampak dukungan sebaya terhadap kesehatan mental, peran stigma, serta implikasi terhadap kualitas hidup, kompetensi komunikasi, dan dukungan bagi remaja yang hidup dengan HIV. Kesimpulan: Dukungan sebaya efektif dalam meningkatkan kesehatan mental dan kualitas hidup orang yang hidup dengan HIV (ODHA) dengan mengurangi depresi, kecemasan, dan stres, sekaligus memperkuat mekanisme koping. Namun, stigma tetap menjadi hambatan yang signifikan, terutama di antara kelompok berisiko tinggi seperti LSL. Mengintegrasikan dukungan sebaya dengan program pengurangan stigma dan layanan kesehatan mental sangat dianjurkan untuk meningkatkan kesejahteraan PLHIV.

## **INTRODUCTION**

HIV (Human Immunodeficiency Virus) remains a significant global health challenge. Base on Unaid, (2024) Approximately 38 million people worldwide live with HIV, with nearly 1.5 million new infections occurring annually. In Indonesia, the Ministry of Health reported more than 543,100 cumulative HIV cases as of 2022, with a rising incidence, particularly among individuals in the productive age group. Beyond medical challenges, people living with HIV (PLHIV) also face various psychosocial issues that significantly impact their quality of life.

The challenges often faced by people living with HIV (PLHIV) are not limited to physical disease management but also involve psychological and social aspects. Stigma and discrimination remain significant barriers for PLHIV, both within social communities and in healthcare settings (WHO, 2022).. In addition, they often experience social isolation, shame, and anxiety about the future, which can trigger mental health disorders such as depression, anxiety, and chronic stress. Poor mental health conditions frequently impact adherence to antiretroviral (ARV) therapy, potentially increasing the risk of disease progression and drug

resistance (Remien et al., 2019).

Peer support has emerged as an effective approach to help people living with HIV (PLHIV) address these challenges. Peer support involves an intervention where individuals with similar life experiences provide emotional support, share information, and foster a sense of solidarity. Studies have shown that peer support can help reduce internalized stigma, enhance coping mechanisms, and strengthen motivation for adherence to treatment (Hermesen et al., 2023). Moreover, peer support serves as a bridge between the psychosocial needs of people living with HIV (PLHIV) and formal healthcare services, fostering a more inclusive and empowering environment.

Research by Berg et al., (2021) demonstrates that peer support provides significant benefits in improving care retention, adherence to antiretroviral therapy (ART), and viral load suppression, particularly during follow-ups of 3 to 12 months. Peer support also increases the likelihood of viral load suppression, with an odds ratio of up to 6.24 at the 6-month follow-up. Peer support is an effective approach and can serve as an integral part of HIV services, especially in resource-limited settings.

However, despite the widely recognized benefits of peer support, systematic research on its effectiveness in improving the mental health of people living with HIV (PLHIV) remains limited. This study aims to evaluate the role of peer support in supporting the mental health of PLHIV, identify its mechanisms of action, and provide evidence-based recommendations for developing more effective programs.

## **METHODS**

This study employs a systematic review approach to evaluate the effectiveness of peer support on the mental health of people living with HIV (PLHIV). The approach follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency and accuracy in the research process. The review includes studies published between 2018 and 2024.

### **Search Process**

The literature search strategy was conducted using several electronic databases, including Google Scholar, PubMed, and ScienceDirect. The primary keywords used were “peer support,” “HIV,” and “mental health.” These keywords were adjusted with Boolean logic operators such as AND and OR to optimize search results. The search focused on articles published in English over the past five years (2018–2024) to ensure the data's relevance to the research topic.

### **Inclusion and Exclusion Criteria**

Articles included in this review were selected based on the following inclusion and exclusion criteria:

#### **Inclusion Criteria:**

1. Studies evaluating peer support for people living with HIV (PLHIV).
2. Studies reporting mental health outcomes, such as depression, anxiety, or quality of life.
3. Studies utilizing cross-sectional, cohort, or experimental designs.
4. Studies published in English between 2019 and 2024.

#### **Exclusion Criteria:**

1. Narrative reviews or articles without primary data.

2. Studies not reporting outcomes relevant to mental health.
3. Studies focusing on populations other than PLHIV or without peer support implementation.

### Study Selection

The study selection process was conducted in two stages. First, all articles retrieved from the initial search were screened by title and abstract to evaluate their relevance. Second, articles that passed the initial stage were fully assessed to ensure they met the inclusion and exclusion criteria.

### Extraction Data

Data from articles meeting the criteria were extracted using a standardized form. Extracted information included article details (author, year of publication), population and sample, research methods, and mental health-related outcomes.

### Study Quality Assessment

The methodological quality of each study was assessed using the Critical Appraisal tool. This evaluation aimed to identify potential biases and determine the strength of evidence in each study.

### Data Analysis

The extracted results were analyzed narratively to identify patterns in findings and research gaps

## RESULTS AND DISCUSSION

From the search and selection process, six articles published between 2018 and 2024 met the criteria for analysis. These studies involved various designs and diverse PLHIV populations, focusing on the effects of peer support on mental health outcomes, including reductions in depression and anxiety as well as improvements in quality of life.

PRISMA Flow Diagram

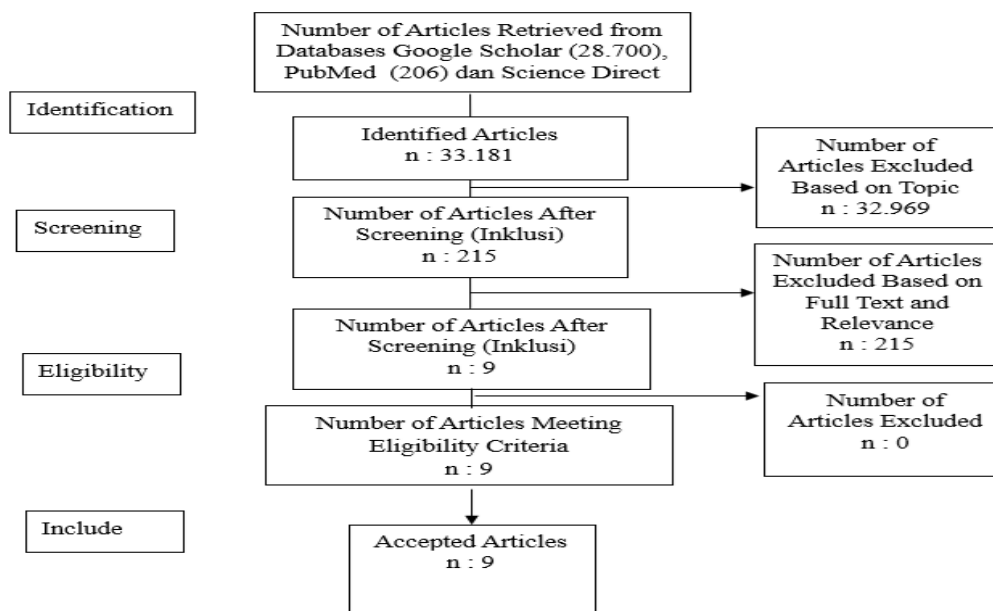


Table of Extraction Data

No	Title (Year, Author)	Location	Sampel and Population	Methods	Result
1	The relationship between stigma, family acceptance, peer support and stress level among HIV-positive MSM (2019, Fallon Victoryna, Sri Yona, Agung Waluyo)	Medan, Indonesia	A total of 176 HIV-positive MSM aged over 18 years, who were able to read and write, were recruited from various healthcare facilities in Medan.	Cross-sectional	55.1% of respondents experienced severe stress. Peer support and family acceptance were not significantly associated with stress; however, stigma showed a positive correlation with stress ( $p = 0.049$ ).
2	"The relationship of social support, mental health, and health-related quality	A total of 350 HIV-positive MSM (mean age 33.7	A total of 350 HIV-positive MSM (mean age 33.7 years) receiving ART were	Social support, particularly the utilization of support, had	"The relationship of social support, mental health, and health-related quality of life in HIV-positive MSM" (2018, Bing Shao et al.)
	of life in HIV-positive MSM" (2018, Bing Shao et al.)	years) receiving ART were recruited from healthcare facilities in Harbin.	recruited from healthcare facilities in Harbin.	both direct and indirect effects on health-related quality of life (HRQOL). Depression significantly contributed to mental health status, while the environmental dimension had the greatest impact on HRQOL.	
3	"Mental Health Distress and Associated Factors	Southwestern Nigeria	A total of 212 HIV-positive adolescents aged 15-19 years were recruited from	Cross-sectional study	The prevalence of mental distress was 34.9%. Alcohol consumption was significantly associated with

	among HIV-Positive Adolescents Attending ART Clinics in Nigeria" (2024, Akadri et al.)		five high-patient-volume clinics.		mental distress, while other factors such as the duration of HIV diagnosis, smoking status, or type of HAART showed no significant impact.
4	"The Effect of Peer Support Group on Depression and Quality of Life among People Living with HIV/AIDS in Kediri" (2016, Astika Rasyiid, Ruben Dharmawan, Supriyadi Hari Respati)	Kediri, Indonesia	A total of 60 PLWHA registered with PSG Friendship Plus Kediri were selected using simple random sampling.	Cross-sectional dengan analisis regresi linear	Peer group support significantly reduced depression ( $b = -0.60$ ; $p < 0.001$ ) and improved quality of life ( $b = 0.32$ ; $p = 0.005$ ). Other contributing factors included education and family income.
5	"The Effect of Depression, Stigma, and Peer Support	Surakarta, Indonesia	A total of 100 PLHIV who were members of the peer support group Solo Plus	Cross-sectional dengan analisis	Peer group support significantly improved the quality of life of PLHIV ( $b = 3.40$ ; $p = 0.013$ ). Conversely,
	Group on the Quality of Life of People Living with HIV/AIDS in Solo Plus Peer Support Group, Surakarta" (2018, Yuli Lutfatul Fajriyah, Argo Demartoto, Bhisma Murti)		were selected using the simple random sampling method.	jalur (path analysis)	stigma ( $b = -1.10$ ; $p = 0.003$ ) and depression ( $b = -4.23$ ; $p = 0.001$ ) significantly reduced the quality of life.
6	"The Role of Peer Support in HIV Testing among Risk Groups with Social Influence and Communication Competency Approaches" (2020, Mamik Hidayah,	Tulungagung, Indonesia	A total of 72 high-risk individuals (FSW, MSM) were included in the study.	Observasional Deskriptif	Peer support increased motivation and awareness for HIV testing by up to 73%. Communication competence (motivation, knowledge, skills) and social influence (44.44% conformity, 43.06% compliance) played a significant role in this success.
	Ratna Dwi Wulandari, Agung Dwi Laksono)				

## Discussion

The findings of this systematic review address several key aspects identified across the studies, including respondent characteristics, the effects of peer support on mental health, the role of stigma, and the implications for quality of life and healthcare services. The discussion is organized into the following categories:

### Respondent Characteristics

The analyzed studies included respondents from diverse demographic groups and risk categories. Most of the studies focused on adults aged 15–50 years who were actively undergoing antiretroviral therapy (ART). Notably, one study conducted in Nigeria highlighted HIV-positive adolescents as a key group, revealing a high prevalence of mental distress within this population. These findings are consistent with the World Health Organization (WHO) report, which noted that in 2021, 27.5% of new global HIV infections occurred among individuals aged 15 to 24. The prevalence of depression among adolescents living with HIV reached 26.07%, more than twice the rate in the general adolescent population (WHO, 2022). This indicates that HIV-positive adolescents face significant psychosocial challenges, making peer support critical in helping them overcome stigma and social isolation.

**Gender and Identity:** Most studies included men who have sex with men (MSM) and women from high-risk groups, such as female sex workers (FSW). Research on MSM in Medan and China highlighted the vital role of peer support in reducing stigma and stress in this demographic.

**Social Background:** Factors such as education, employment, and economic status often influenced the effectiveness of peer support interventions, as demonstrated in studies conducted in Kediri and Surakarta.

### Effects of Peer Support on Mental Health

Peer support has been shown to significantly alleviate mental health symptoms, including depression, anxiety, and stress, among people living with HIV/AIDS (PLHIV). Studies conducted in Surakarta and Kediri demonstrated that peer support groups foster a safe and inclusive environment where individuals can share experiences and receive emotional support. This sense of community not only reduces social isolation but also strengthens coping mechanisms, empowering PLHIV to better navigate their psychosocial challenges.

### Effects of Peer Support on Mental Health

This aligns with the social support theory by Song et al. (2014), which posits that social support, including emotional and informational support, serves as a protective factor against psychological stress and enhances mental well-being.

One of the key outcomes of peer support groups is the reduction of depression. Through positive interactions with individuals who share similar experiences, PLHIV feel more valued and supported, thereby alleviating their emotional burden. Social support mitigates the negative impact of stress by fostering a sense of empowerment and optimism (Bekiros et al., 2022).

Moreover, a study in China highlighted that peer support also contributes to improvements in the mental and social dimensions of health-related quality of life (HRQOL). Peer support enables PLHIV to enhance their interpersonal relationships, a vital dimension

of HRQOL. This finding is consistent with Erik Erikson's psychosocial development theory, which underscores the importance of positive social relationships in psychological development and well-being, particularly for individuals facing social challenges like HIV stigma.

By providing a platform for sharing experiences, fostering solidarity, and strengthening social networks, peer support becomes a crucial strategy in the mental health management of PLHIV. Therefore, integrating peer support programs into HIV healthcare services represents an effective approach to enhancing the mental well-being and overall quality of life of PLHIV.

### **The Role of Stigma in Mental Health**

Stigma surrounding HIV remains a significant challenge that profoundly impacts the mental health of individuals, particularly among men who have sex with men (MSM). A study by Victoryna et al. (2019) in Medan found a direct correlation between stigma and stress levels in the MSM population ( $p=0.049$ ). This stigma not only affects psychological conditions but also worsens the quality of life for individuals living with HIV. The heightened stress caused by stigma often stems from discrimination, social harassment, and fear of exclusion.

While peer support has proven effective in mitigating the effects of stigma, the findings indicate a need for more integrated intervention approaches. Such approaches should include public education to reduce social stigma, training for healthcare professionals to provide stigma-free care, and community-based interventions that promote social acceptance. For instance, a study by UNAIDS (2024) demonstrated that community-based programs focused on empowering individuals living with HIV can reduce internalized stigma and enhance their engagement in healthcare services.

By addressing stigma at multiple levels individual, community, and institutional peer support programs can be more effective in improving the mental health and overall well-being of PLHIV.

### **Implications for Quality of Life**

Peer support plays a pivotal role in enhancing the quality of life for individuals living with HIV/AIDS, particularly in the social and mental dimensions. A study in China by Bing (Shao et al., 2018) highlighted the significant impact of social support on improving health-related quality of life (HRQOL). Social support helps alleviate symptoms of depression and anxiety, which are often consequences of stigma and psychological stress faced by individuals with HIV.

Environmental dimensions, such as access to quality healthcare services, social security, and community support, also play an essential role in improving HRQOL. Individuals with robust environmental support are more likely to adopt healthy lifestyles, actively engage in healthcare, and maintain a positive outlook on their future. Consistent peer support has been linked to higher adherence to antiretroviral therapy, contributing to improved physical and psychological health. According to Pradana et al. (2022), strong social networks provide access to vital resources such as information, emotional support, and motivation. In the context of HIV/AIDS, peer groups serve as critical resources for combating stigma, reinforcing a positive self-identity, and fostering psychological resilience.



Furthermore, the Stress Buffering Hypothesis by Cohen and Wills (1985) explains how social support acts as a "buffer" against the adverse effects of stress. This support not only provides practical assistance but also helps individuals feel accepted, valued, and motivated to adhere to treatment and maintain their mental health. Supporting this, research by Lelaka et al. (2022) found that individuals with peer support reported higher life satisfaction due to having a space to share experiences and receive constructive advice.

Overall, peer support impacts not only the social and mental dimensions but also the physical and environmental aspects of the quality of life for individuals living with HIV/AIDS. Strengthening peer support systems, particularly through training and community facilitation, can holistically improve the quality of life for individuals with HIV.

### **Communication Competence in Peer Support**

The Interpersonal Communication Competence Theory by Vansteenkiste et al. (2020) underscores the importance of communication skills in establishing effective interpersonal relationships. This theory highlights three core components of competent communication: knowledge (understanding relevant information), skills (ability to convey information appropriately), and motivation (willingness to engage in interaction). In the context of peer support, peer supporters with strong communication competencies can better understand the needs of those they support, convey information empathetically, and encourage positive actions, such as undergoing testing or adhering to treatment.

Research by McKinney-Prupis et al. (2023) further demonstrates that peer supporters with well-developed communication training are more successful in improving adherence to antiretroviral therapy among individuals with HIV. They note that empathetic, solution-oriented communication helps reduce internalized stigma and enhances individuals' engagement with care.

By focusing training on knowledge, motivation, and communication skills, peer supporters can become effective agents of change. They can not only motivate individuals to undergo HIV testing but also foster supportive relationships, ultimately enhancing the success of community-based interventions in combating HIV/AIDS.

### **Peer Support for HIV-Positive Adolescents**

Research by Akadri et al. (2024) in Nigeria reveals that HIV-positive adolescents experience a high prevalence of mental distress (34.9%). This figure reflects a severe level of emotional stress that, if left unaddressed, can significantly hinder their overall quality of life. These findings underscore the importance of peer support in fostering positive social interactions and encouraging adolescents to combat stigma while maintaining their mental health.

Peer support is an effective approach to addressing these challenges. Peer support groups provide a safe space for adolescents to share experiences, access information, and receive emotional support from others who have undergone similar challenges. These positive social interactions help adolescents develop stronger coping mechanisms, reduce feelings of isolation, and boost their self-confidence.

The Social Learning Theory by Bandura, as cited in Firmansyah & Saepuloh (2022), supports the effectiveness of peer support. According to this theory, individuals learn through observation and interaction with others. In this context, HIV-positive adolescents can draw lessons from the experiences of their peers who have successfully managed similar

challenges. This not only provides inspiration but also motivates adolescents to take proactive steps in maintaining their mental and physical health.

Peer support also plays a vital role in reducing internalized stigma, which is often experienced by HIV-positive adolescents. Fox et al. (2018) describe internalized stigma as the process of adopting society's negative attitudes toward HIV, which can lead to low self-esteem and feelings of helplessness. Peer support that emphasizes empowerment and acceptance helps adolescents overcome this stigma, enabling them to live with greater confidence.

Additionally, peer support has been shown to improve adherence to antiretroviral (ARV) treatment. A study by McKinney-Prupis et al. (2023) found that adolescents participating in peer support groups were more likely to follow their treatment schedules, resulting in better long-term health outcomes.

Overall, peer support is a crucial component in supporting the mental and physical well-being of HIV-positive adolescents. To enhance its effectiveness, peer supporters should receive training to provide structured and tailored support that meets adolescents' needs. Collaboration with families, schools, and communities is also essential to create a supportive and inclusive environment for HIV-positive adolescents. With such an approach, adolescents can face their challenges with greater confidence and achieve an improved quality of life.

## CONCLUSION

Peer support is an effective approach to improving the mental health and quality of life of people living with HIV/AIDS (PLHIV). Based on the findings of this systematic review, peer support plays a crucial role in reducing symptoms of depression, anxiety, and stress by creating a safe environment for sharing experiences and strengthening coping mechanisms. Additionally, peer support has been shown to enhance the social and mental dimensions of quality of life, particularly for high-risk populations such as men who have sex with men (MSM) and HIV-positive adolescents.

However, stigma remains a significant barrier to achieving optimal mental health, especially among MSM. While peer support helps mitigate the effects of stigma, the findings emphasize the need for more integrated stigma-reduction programs within healthcare services. Training peer supporters to improve their communication competence, knowledge, and motivation is also essential for the success of these interventions.

Therefore, integrating peer support programs into HIV healthcare services, combined with a multidisciplinary approach that includes stigma reduction and mental health services, is highly recommended. This approach will not only enhance the mental well-being of PLHIV but also support the sustainability of the programs in the long term.

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