

# REVIEW ARTICLE

## People Living with HIV Experiences from Peer Support: A Meta-Synthesis

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### ABSTRACT

**Background:** Peer support groups play a crucial role in enhancing the psychosocial well-being of people living with HIV (PLHIV), and understanding their experiences is essential for optimizing their impact. This review aimed to identify, explore, and synthesize the experiences of PLHIV participating in peer support groups.

**Methods:** A systematic review and meta-synthesis were conducted using the thematic synthesis approach developed by Thomas and Harden. Comprehensive searches were performed in PubMed, Scopus, CINAHL, Cochrane, and Web of Science up to December 2024, using Boolean combinations of keywords related to HIV, peer support, and qualitative research. Studies were included if they used qualitative methods with a focus on PLHIV's experiences in peer support groups and published in English. Study quality was appraised using the Critical Appraisal Skills Programme (CASP) Qualitative Research Checklist. The review is registered in PROSPERO (CRD42025637718).

**Results:** Out of 1,956 records identified, 20 qualitative studies met the inclusion criteria. The included studies demonstrated substantial geographical diversity, with representation from Africa, North America, Asia, Europe, and Australia. The analysis revealed three main themes: (1) Motivations for Joining Peer Support Groups; (2) Positive Impacts; and (3) Challenges in Participation.

**Conclusion:** Peer support groups help PLHIV gain motivation, emotional strength, and a sense of belonging. Despite these benefits, challenges such as stigma and confidentiality concerns must be addressed through sustainable programs and strong health-community partnerships.

**Keywords:** Acquired Immune Deficiency Syndrome Virus, Human Immunodeficiency Virus, Peer Group, Qualitative Research, Systematic Review

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## INTRODUCTION

Human immunodeficiency virus (HIV) remains a major global public health concern, with transmission continuing in all countries. By the end of 2024, an estimated 40.8 million people were living with HIV worldwide, and approximately 630,000 people died from HIV-related causes, while 1.3 million new infections were recorded.<sup>1</sup> These figures not only reflect an ongoing health crisis but also signify serious social and economic consequences, demanding sustained global attention.<sup>2-4</sup> People living with HIV (PLHIV) often face challenges that affect physical, mental, and social well-being, such as susceptibility to opportunistic infections and comorbidities, including cardiovascular disease, type 2 diabetes, and renal failure.<sup>5</sup> Adherence issues with antiretroviral therapy (ART) are often compounded by side effects, mental health challenges, such as depression and anxiety, and limited access to healthcare.<sup>3,6,7</sup> Social stigma also prevents individuals from getting tested for HIV, starting treatment, or maintaining adherence to ART.<sup>3,8</sup> Addressing these challenges requires a comprehensive approach that integrates physical and mental health services, social support, and stigma reduction to improve the well-being of PLHIV and meet the Joint United Nations Programme on HIV/AIDS (UNAIDS) 2030 targets for ending HIV as a public health threat.<sup>8-10</sup>

Peer support groups have proven to be a crucial approach in supporting the well-being of PLHIV, providing emotional, social, and practical assistance. These groups offer a space for members to share experiences and help overcome the social stigma that is often a significant barrier to healthcare services.<sup>11</sup> Experience-based peer support, grounded in shared lived experiences, has been shown to foster genuine understanding, emotional validation, and meaningful support among individuals facing health-related challenges.<sup>12</sup> Research shows that chronic care model-based peer support groups effectively improve adherence to ART, increasing CD4 counts, reducing viral loads, decreasing the risk

of opportunistic infections, and ultimately enhancing the quality of life for PLHIV.<sup>13</sup> Additionally, implementing peer support groups aligns with social support theory, which emphasizes the importance of interpersonal relationships in enhancing psychological well-being and aiding individuals in coping with challenges.<sup>14</sup> In the context of HIV, peer support groups provide opportunities for PLHIV to share coping strategies that can enhance the understanding of disease management and strengthen their social networks.<sup>15, 16</sup>

Despite the recognized benefits of peer support groups, there remains a significant gap in the literature regarding how PLHIV perceive and experience their participation in such groups. While a previous study has primarily focused on clinical outcomes such as improved ART adherence and reduced viral load,<sup>13</sup> limited attention has been paid to the experiential dimensions of peer support engagement from the recipients' perspectives. A recent meta-synthesis compiled qualitative evidence on peer support programs, but its scope was limited to the perspectives of HIV peer volunteers rather than the recipients of support.<sup>17</sup> As such, no existing synthesis has comprehensively explored how PLHIV themselves interpret, engage with, and are impacted by participation in peer support groups. The present study addresses this gap and aims to identify, explore, and synthesize qualitative findings on the experiences of people living with HIV in participating in peer support groups. While a systematic review and meta-analysis have demonstrated positive clinical outcomes, such as improved ART adherence and viral suppression,<sup>15</sup> such quantitative evidence provides limited insight into the nuanced emotional and social experiences of PLHIV within peer support settings. Given the sensitive and complex nature of these experiences, a qualitative meta-synthesis is required to provide a deeper understanding of the participants' perspectives and challenges.

## MATERIALS AND METHODS

### *Design*

This review study employs meta-synthesis as a method to systematically explore the experiences of PLHIVs who participate in peer support groups. Meta-synthesis is a research technique utilized to review and integrate findings from qualitative studies, thereby providing a more comprehensive understanding of the investigated phenomena.<sup>18</sup> This synthesis report is prepared using the Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) statement to ensure transparency in reporting qualitative research synthesis.<sup>19</sup> This systematic synthesis was registered with PROSPERO under the code of CRD42025637718. The meta-synthesis process includes several steps: identifying the research question, assessing the quality of studies, and synthesizing findings.<sup>20, 21</sup> After literature selection and quality assessment, a thematic approach was used for qualitative meta-synthesis, as described by Thomas and Harden.<sup>22</sup> The process began with coding, where findings from original studies were categorized into codes. These codes were then organized into descriptive sub-themes that structured the findings more coherently. The final step involved developing analytical themes to provide a deeper interpretation of the studies included in the analysis, which is helpful for policy or practice formulation.

### *Identifying the Research Question*

The research question was developed using the SPIDER framework,<sup>23</sup> which includes Sample, Phenomenon of Interest, Design,

Evaluation, and Research type to ensure that all relevant aspects of the phenomenon under study were covered (Table 1). The formulated question was: “What are the experiences of PLHIVs in participating in peer support groups?” This question aimed to document in-depth experiences of PLHIVs, which is expected to yield evidence-based practical recommendations for enhancing support programs.

### *Search Strategy*

An extensive literature search was conducted across five major databases: PubMed, Scopus, CINAHL, Cochrane Library, and Web of Science to ensure comprehensive coverage. The search included studies published between January 2014 and December 2024. A combination of free-text terms and controlled vocabulary (e.g., MeSH) was used, with Boolean operators (“AND”, “OR”) to capture studies on the experiences and perceptions of PLHIV involved in peer support groups. Keywords included terms related to HIV (e.g., “HIV”, “AIDS”, “people living with HIV”), peer support (e.g., “peer support”, “support group”, “social support”), and qualitative experiences (e.g., “experience”, “perception”, “feedback”, “psychosocial”, “well-being”). The search strategies were adapted to fit each database’s indexing system. An example of the PubMed search strategy is provided in Table 2.

### *Inclusion and Exclusion Criteria*

The inclusion and exclusion criteria were carefully developed to ensure the relevance, quality, and methodological appropriateness of the studies included in this meta-synthesis.

**Table 1:** Using SPIDER framework to Design the Research Question

| Variable               | Description                                                                                                                                          |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sample                 | Individuals living with HIV who are involved in peer support groups.                                                                                 |
| Phenomenon of Interest | Experiences of participating in peer support groups and their impact on individuals.                                                                 |
| Design                 | Qualitative methods are used to deeply understand the experiences of people living with HIV through in-depth interviews and focus group discussions. |
| Evaluation             | Participants reported Experiences and perceptions during and after peer support groups.                                                              |
| Research Type          | Qualitative research that explores and analyzes findings from participation in peer support groups.                                                  |

**Table 2:** Example of Search Strategy in PubMed

| Database | Search Strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PubMed   | (“HIV”[All Fields] OR “human immunodeficiency virus”[All Fields] OR “AIDS”[All Fields] OR “acquired immunodeficiency syndrome”[All Fields]) AND (“support group”[All Fields] OR “peer support”[All Fields] OR “community group”[All Fields] OR “social support”[All Fields]) AND (“experience”[All Fields] OR “perception”[All Fields] OR “feedback”[All Fields] OR “testimony”[All Fields]) AND (“living”[All Fields] OR “life”[All Fields] OR “survivor”[All Fields] OR “individual”[All Fields]) AND (“mental health”[All Fields] OR “well-being”[All Fields] OR “psychosocial”[All Fields]) |

The inclusion criteria were: (1) studies involving PLHIV who participated in peer support groups; (2) studies that employed qualitative research methods (e.g., interviews, focus groups, content analysis, grounded theory, phenomenology, or other qualitative approaches); (3) articles published in peer-reviewed journals between 2014 and December 2024; and (4) studies written in English and available in full-text format.

The exclusion criteria included: (1) studies focusing solely on the perspectives of healthcare providers, program implementers, or organizational outcomes without exploring the lived experiences of PLHIV; (2) theoretical articles, conceptual papers, or editorials lacking primary qualitative data; (3) studies with unclear methodology or insufficient reporting of data collection and analysis processes; and (4) articles not available in full text or published in languages other than English.

### *Study Screening and Selection*

The screening and selection process were done systematically using Mendeley software to manage and remove duplicates efficiently. Initial screening was performed by two researchers (SBS and AS) who independently read titles and abstracts to exclude irrelevant articles. Any disagreements arising during the initial screening were resolved through discussion to reach a consensus. Both researchers assessed articles passing this initial screening in full text to further evaluate alignment with the established inclusion criteria. Screening decisions and tracking of inclusion criteria were documented systematically using Microsoft Excel to enhance reproducibility.

### *Quality Appraisal*

The methodological quality of the included studies was critically appraised using the Critical Appraisal Skills Programme (CASP) Qualitative Research Checklist, which is widely recommended for assessing health-related qualitative evidence synthesis.<sup>24</sup> Two independent reviewers (SBS and AS) evaluated each study using the checklist to ensure methodological rigor and relevance. The appraisal covered key aspects, such as clarity of research objectives, appropriateness of methodology and design, recruitment strategy, data collection and analysis, ethical considerations, and the contribution of findings. Any discrepancies between reviewers were resolved through discussion involving a third assessor (RAP) until consensus was reached.

### *Data Extraction*

The data extraction process was performed comprehensively to ensure that all relevant information from the obtained documents was accurately collected. Information was extracted independently by three researchers (SBS, AS, and RW), covering author names, publication year, country or region, research objectives, participants, data collection methods, study design, and data analysis methods, which led to the emergence of the main themes. Discrepancies that arose during the data extraction process were discussed collectively until a consensus was reached. The collected data were evaluated and synthesized independently by three assessors (SBS, AS, and TWN), using thematic synthesis based on the three steps outlined by Thomas and Harden.<sup>22</sup> The first step involved thoroughly reviewing



each article to understand, identify, extract, organize, compare, link, map, and integrate relevant information. Relevant texts were then systematically coded line by line and grouped into sub-themes and themes. The next step involved integrating the analysis results through a synthesis process that facilitated a deep understanding of the reported experiences. The assessors matched the descriptive themes generated with the textual data from the reviewed articles, allowing deeper analytical themes to emerge. The final step involved refining the themes through discussion among the three assessors. Disagreements that arose during the analysis process were resolved through discussion until a consensus was reached. All extracted data were managed and analyzed manually using Microsoft Excel, which was employed to construct coding matrices, organize emerging subthemes and themes, and document synthesis steps throughout the analysis process.

## RESULTS

The initial search yielded 1,956 articles (Scopus: 766, PubMed: 220, Cochrane: 121, CINAHL: 313, Web of Science: 536). After removal of 1,011 duplicates, 945 records were screened based on titles and abstracts. A total of 909 records were excluded because they were not relevant to peer support or did not involve PLHIV. Subsequently, 36 full-text articles were assessed for eligibility. Of these, 16 articles were excluded for the following reasons: not reported in English (n= 5) and insufficient data for extraction (n=11). A total of 20 studies were finally included in the meta-synthesis.<sup>11, 16, 25-42</sup> The screening process is visualized in the PRISMA diagram (Figure 1).

The meta-synthesis included twenty studies from various countries: three from the United States,<sup>25-27</sup> three from Uganda,<sup>16, 28, 29</sup> and three from Indonesia;<sup>30-32</sup> two from Canada<sup>33, 34</sup> and two from Kenya;<sup>11, 35</sup> and one each from Australia,<sup>36</sup> Tanzania,<sup>37</sup> India,<sup>38</sup> Norway,<sup>39</sup> Sweden,<sup>40</sup> Zimbabwe,<sup>41</sup> and South Africa.<sup>42</sup>

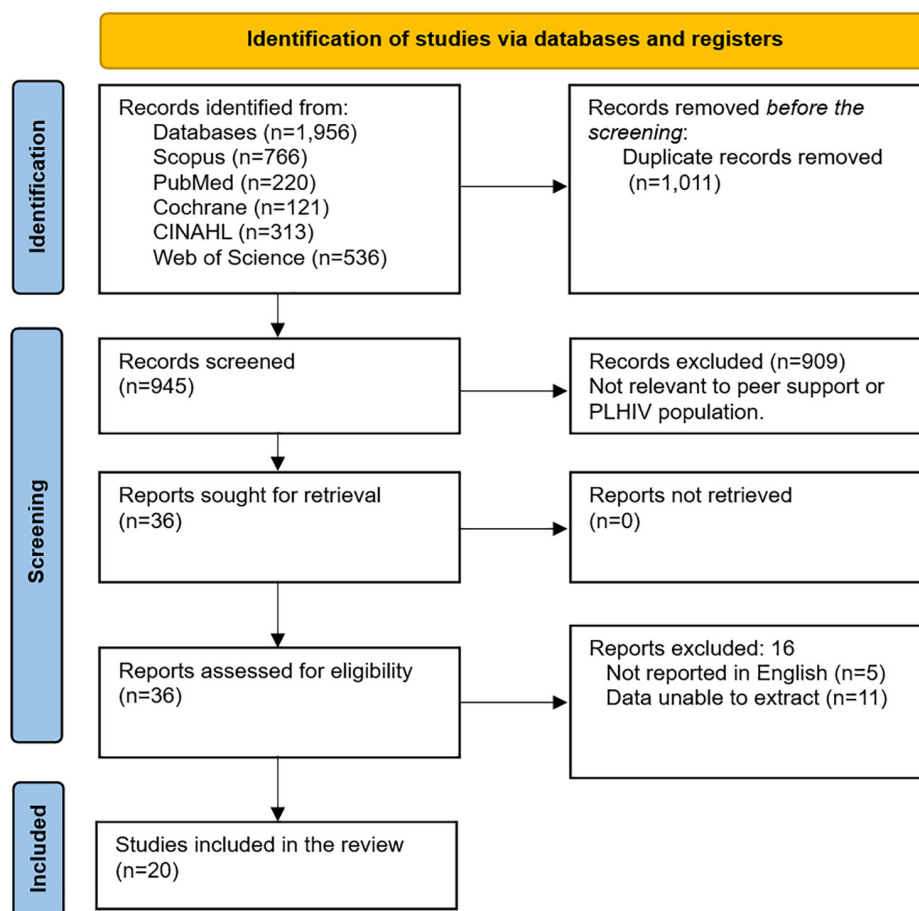


Figure 1: PRISMA Flow Diagram

**Table 3:** Summary of the 20 qualitative studies included in this study

| No. | Author and Years                          | Country   | Research Objective                                                                                                                                                                              | Participant                                                      | Data Collection                                                                                      | Desain of the study                                                                             | Data Analysis                  | Key Findings                                                                                                                                                                                  |
|-----|-------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | (Jolle et al., 2022) <sup>28</sup>        | Uganda    | To explore HIV <sup>a</sup> -related stigma experiences and coping strategies among pregnant women                                                                                              | 12 HIV-positive pregnant women aged between 17 and 35 years.     | Semi-structured in-depth interviews using a guide with open-ended questions.                         | Qualitative descriptive study                                                                   | Inductive thematic analysis    | HIV-related enacted stigma experiences among pregnant women<br>HIV-related stigma coping strategies among pregnant women                                                                      |
| 2.  | (Martawinarti et al., 2020) <sup>31</sup> | Indonesia | To explore the lived experiences of PLWHA <sup>b</sup> undergoing ART <sup>c</sup>                                                                                                              | 13 PLWHA (10 males, 3 females), aged 22–51 years                 | In-depth semi-structured interviews, field notes                                                     | Qualitative phenomenological study.                                                             | Colaizzi's method (9 stages).  | Knowledge Self-Motivation Social Support Disease Management Skills Adherence Quality of Life                                                                                                  |
| 3.  | (Wells et al., 2022) <sup>36</sup>        | Australia | To explore the experiences of peer support among PLHIV <sup>d</sup> recently diagnosed in Australia, including how this support helps them navigate social, emotional, and clinical challenges. | 26 PLHIV (24 males, 2 females), mostly gay men, aged 20–59 years | In-depth semi-structured interviews, conducted face-to-face, via telephone, or video conferencing.   | Qualitative descriptive study                                                                   | Thematic analysis              | Peer-based Programs as Providing Interpersonal and Social Support<br>Peer Navigators as Providing a Lived Experience Perspective<br>Considerations When Matching PLHIV to Appropriate Support |
| 4.  | (Karusala et al., 2021) <sup>35</sup>     | Kenya     | To explore the experiences of youth living with HIV participating in WhatsApp-based peer support groups, focusing on social dynamics, engagement patterns, and aspirations.                     | 55 youth living with HIV                                         | Semi-structured interviews, chat records, notes from introductory and closing meetings, and surveys. | Qualitative descriptive study                                                                   | Thematic analysis              | Social Dynamics and Interaction<br>Emotional and Informational Support<br>Aspirations and Motivation                                                                                          |
| 5.  | (Oliver et al., 2023) <sup>33</sup>       | Canada    | To understand the experiences and impacts of HIV stigma for PLHIV and co-create knowledge to challenge stigma in healthcare, social services, and public policy sectors.                        | 20 interview participants (11 women, 9 men)                      | Mixed methods (surveys and in-depth interviews)                                                      | Community-Based Participatory Research (CBPR <sup>e</sup> ) with a social-ecological framework. | Grounded theory coding methods | Personal Level Factors<br>Interpersonal Factors<br>Community Factors                                                                                                                          |

| No. | Author and Years                         | Country   | Research Objective                                                                                                                                                                            | Participant                                                                           | Data Collection                                                  | Desain of the study                                           | Data Analysis               | Key Findings                                                                                                                                                                                                                   |
|-----|------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.  | (Logie et al., 2016) <sup>34</sup>       | Canada    | To explore the experiences and perceived benefits of social support group participation among LGBT African and Caribbean newcomers and refugees.                                              | 29 LGBT African and Caribbean newcomers                                               | Focus groups                                                     | Qualitative study with a community-based partnership approach | Narrative thematic analysis | Intrapersonal Benefits<br>Interpersonal Benefits<br>Community Impact<br>Structural Impact                                                                                                                                      |
| 7.  | (Ramaiya et al., 2016) <sup>37</sup>     | Tanzania  | To identify the psychosocial and mental health challenges faced by HIV-positive adolescents in a resource-poor setting in Tanzania.                                                           | 24 HIV-positive receiving outpatient HIV care at a medical center in Moshi, Tanzania. | In-depth qualitative interviews                                  | Qualitative study                                             | Thematic analysis           | Living with HIV<br>Domestic and Family Environments<br>Social and Peer Environments                                                                                                                                            |
| 8.  | (Fauk et al., 2022) <sup>32</sup>        | Indonesia | To understand the self-responses of women living with HIV in Yogyakarta, Indonesia, to the psychological challenges and stigma of HIV.                                                        | 26 women living with HIV                                                              | In-depth interviews.                                             | Qualitative descriptive                                       | Thematic analysis           | HIV-related Challenges<br>Women's Self-Response to Challenges                                                                                                                                                                  |
| 9.  | (Chitra et al., 2019) <sup>38</sup>      | India     | To assess the quality of life of adolescents living with HIV/AIDS through their psychological, social, and spiritual experiences.                                                             | Adolescents aged 13-19 years (9 participants), including 6 males and 3 females        | Semi-structured interviews                                       | Qualitative phenomenological approach                         | Thematic analysis.          | Reluctance to Disclosure of HIV Status<br>Experiences with Disclosure<br>Social Support<br>Spiritual Well-Being<br>Difference in Living with the Disease Before and After Disclosure<br>Positive Living<br>Sexuality and Shame |
| 10. | (Øgård-Repål et al., 2022) <sup>39</sup> | Norway    | To explore the experiences of peer supporters (PSs) <sup>†</sup> and healthcare professionals on the role and contributions of peer support in outpatient clinics for people living with HIV. | 10 peer supporters and 5 healthcare professionals.                                    | Semi-structured in-depth interviews and focus group discussions. | Exploratory qualitative study                                 | Reflexive thematic analysis | Emotionally Honest Conversations<br>Promote Mutual Support<br>Negotiation of Preconceptions Create Reframed Understandings of HIV<br>Critical Components for Facilitating Peer Support                                         |

| No. | Author and Years                          | Country  | Research Objective                                                                                                                                                                                                                             | Participant                                   | Data Collection                 | Desain of the study | Data Analysis     | Key Findings                                                                                                                                                                                                                                                                              |
|-----|-------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------|---------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11. | (Diaye et al., 2023) <sup>40</sup>        | Sweden   | To explore how recently diagnosed men perceive and experience peer support for HIV.                                                                                                                                                            | 10 men living with HIV                        | In-depth individual interviews. | Qualitative study   | Content analysis. | Accessing Information and Skill Sets<br>Getting to Safely Explore via the Experiences of Others<br>Having the Right Peer at the Right Location                                                                                                                                            |
| 12. | (Isabirye et al., 2023) <sup>29</sup>     | Uganda   | To assess the factors influencing ART adherence among HIV-positive patients in community client-led ART delivery groups.                                                                                                                       | 25 expert clients living with HIV/AIDS        | In-depth interviews             | Qualitative study   | Thematic analysis | Healthcare Worker–Client Relationship<br>Saving Transport Cost<br>Benefits of ART Adherence<br>Religious Influence<br>Peer Influence to Use of Alternative Medicine<br>Conflict in the Group<br>Stigma                                                                                    |
| 13. | (Zamudio-Haas et al., 2024) <sup>41</sup> | Zimbabwe | To explore the impacts of the Zvandiri program, a community-based, peer-led treatment support model for young adults living with HIV, focusing on how Community Adolescent Treatment Supporters facilitated linkage and retention in HIV care. | 45 individuals, with 15 males and 30 females. | In-depth interviews             | Qualitative study   | Thematic analysis | Learning to Live with HIV through Peer Support and Education: “it does not mean you are no longer a person”<br>Disclosure, Discrimination and Social Support: “I’m still human and worth a life”<br>Practical and Social Support for HIV Treatment: “Do not be afraid, you are not alone” |
| 14. | (Sommer et al., 2024) <sup>25</sup>       | USA      | To explore the experiences and advice shared among women living with HIV in the Southern USA <sup>g</sup> , focusing on peer support’s role in managing their condition and improving their quality of life.                                   | 45 women with HIV                             | In-depth interviews             | Qualitative study   | Thematic analysis | Consistency in Disease Management<br>Practical, Non-Medical Advice<br>Social and Emotional Support                                                                                                                                                                                        |



| No. | Author and Years                     | Country      | Research Objective                                                                                                                                          | Participant                    | Data Collection                        | Desain of the study                | Data Analysis             | Key Findings                                                                                                                                                                                                                                                  |
|-----|--------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------|------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15. | (Iryawan et al., 2022) <sup>30</sup> | Indonesia    | To explore the impacts of peer support on HIV care access and engagement among people who inject drugs in Indonesia.                                        | 20 participants                | Semi-structured in-depth interviews.   | A community-led qualitative design | Thematic analysis         | Impact of Peer Support on Testing, Linkage to, and Engagement in HIV Care among PWID <sup>b</sup> LHV <sup>i</sup><br>Support Mechanisms in Peer Support                                                                                                      |
| 16. | (Monroe et al., 2017) <sup>16</sup>  | Uganda       | To examine the implementation processes and outcomes of a peer support intervention aimed at improving engagement in HIV care among people living with HIV. | 39 participants                | In-depth interviews.                   | Qualitative study                  | Thematic analysis         | Information Motivation<br>Behavioral skills<br>Situational factors<br>Challenges and areas for improvement<br>Trial insights                                                                                                                                  |
| 17. | (Rencken et al., 2021) <sup>42</sup> | South Africa | To explore the impact of peer support programs on treatment adherence and psychosocial well-being among adolescents living with HIV.                        | 31 adolescents living with HIV | Focus groups and individual interviews | Qualitative study                  | Thematic analysis         | Peer support groups provide encouragement for adherence and essential psychosocial support<br>HIV serostatus disclosure challenges outside the family<br>The peer support group fostered fundamental and meaningful peer relationships for ALHIV <sup>i</sup> |
| 18. | (Cook et al., 2018) <sup>26</sup>    | USA          | To identify how people living with HIV conceptualize emotional support needs and delivery at diagnosis.                                                     | 27 individuals living with HIV | Semi-structured interviews.            | Grounded theory approach           | Qualitative data analyzed | Identification Connection<br>Navigational Presence<br>Delivery of Emotional Support                                                                                                                                                                           |
| 19. | (Kako et al., 2021) <sup>11</sup>    | Kenya        | To understand how women with HIV sustain peer support groups in rural areas.                                                                                | 20 women living with HIV.      | Focus group discussions.               | Descriptive qualitative study.     | Thematic analysis         | Platform for Engaging in Income Generation<br>Table Banking<br>Food Security<br>Finding Financial and Moral Support<br>Challenges of Sustaining Peer Support Groups                                                                                           |

| No. | Author and Years                       | Country | Research Objective                                                                                                                               | Participant                                  | Data Collection            | Desain of the study | Data Analysis     | Key Findings                                                                                                                                                            |
|-----|----------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------|---------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20. | (Gervolino et al., 2024) <sup>27</sup> | USA     | To explore how social support networks affect the lives of older adults living with HIV and how these networks are impacted by stigma and aging. | 40 older adults (ages 51–69) living with HIV | Semi-structured interviews | Qualitative study   | Thematic analysis | Overall Impact of Support Group<br>Life Improvement through Support Groups<br>Challenges in Finding Support Groups<br>Stigma and Discrimination Impacting Relationships |

<sup>a</sup>HIV: Human Immunodeficiency Virus; <sup>b</sup>PLWHA: People Living With HIV/AIDS; <sup>c</sup>ART: Antiretroviral Therapy; <sup>d</sup>PLHIV: People Living With HIV; <sup>e</sup>CBPR: Community-Based Participatory Research; <sup>f</sup>PSs: Peer Supporters; <sup>g</sup>USA: United State of America; <sup>h</sup>PWID: People Who Inject Drugs; <sup>i</sup>LHIV: Living With HIV; <sup>j</sup>ALHIV: Adolescents Living With HIV

These studies utilized diverse qualitative methodological approaches, including descriptive, phenomenological, narrative, and grounded theory designs. All studies aimed to explore the experiences of PLHIVs participating in peer support groups. The number of participants in each study ranged from 5 to 60. The comprehensive characteristics of each study, including methodology and research focus, are presented in Table 3. Among the 20 included studies, 14 explicitly reported participants' sex, and 11 provided age ranges or mean ages. Reported ages ranged from 13 to 69 years, covering men, women, adolescents, and lesbian, gay, bisexual, or transgender individuals living with HIV. However, due to inconsistencies in reporting and ethical concerns about identifiability in small samples, demographic summaries are presented narratively rather than quantitatively.

Table 4 presents the results of the methodological quality assessment using the CASP Qualitative Research Checklist for the studies included in the meta-synthesis. The assessment was based on 10 criteria used to evaluate the methodological strength of each study. Overall, all studies demonstrated strong quality, with a high level of agreement among assessors. Most studies met all relevant criteria although some articles exhibited potential biases, particularly concerning the relationship between researchers and participants. These results confirm that the data used in this synthesis are valid and reliable.

Using the thematic synthesis approach by Thomas and Harden,<sup>22</sup> three major themes and seven sub-themes were identified to describe how PLHIV engage with and are affected by peer support groups. The themes are (1) Motivations for Joining Peer Support Groups, (2) Positive Impacts of Peer Support Groups, and (3) Challenges in Participating (Table 5).

**Table 4:** Quality assessment using the CASP Qualitative Research Checklist for the studies included in the meta-synthesis

| No | Author(s) and year                        | 1. Was there a clear statement of the aims of the research? | 2. Is a qualitative methodology appropriate? | 3. Was the research design appropriate to address the aims of the research? | 4. Was the recruitment strategy appropriate to the aims of the research? | 5. Was the data collected in a way that addressed the research issue? | 6. Has the relationship between researcher and participants been adequately considered? | 7. Have ethical issues been taken into consideration? | 8. Was the data analysis sufficiently rigorous? | 9. Is there a clear statement of findings? | 10. How valuable is the research? | CASP <sup>a</sup> quality rating |
|----|-------------------------------------------|-------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|--------------------------------------------|-----------------------------------|----------------------------------|
| 1. | (Jolle et al., 2022) <sup>28</sup>        | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 2  | (Martawinarti et al., 2020) <sup>31</sup> | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 3  | (Wells et al., 2022) <sup>36</sup>        | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Unclear                                                                                 | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 4  | (Karusala et al., 2021) <sup>35</sup>     | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Unclear                                                                                 | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 5  | (Oliver et al., 2023) <sup>33</sup>       | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 6  | (Logie et al., 2016) <sup>34</sup>        | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 7  | (Ramaiya et al., 2016) <sup>37</sup>      | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 8  | (Fauk et al., 2022) <sup>32</sup>         | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 9  | (Chitra et al., 2019) <sup>38</sup>       | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Unclear                                                                                 | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 10 | (Øgård-Repål et al., 2022) <sup>39</sup>  | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 11 | (Diaye et al., 2023) <sup>40</sup>        | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 12 | (Isabirye et al., 2023) <sup>29</sup>     | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |

| No | Author(s) and year                        | 1. Was there a clear statement of the aims of the research? | 2. Is a qualitative methodology appropriate? | 3. Was the research design appropriate to address the aims of the research? | 4. Was the recruitment strategy appropriate to the aims of the research? | 5. Was the data collected in a way that addressed the research issue? | 6. Has the relationship between researcher and participants been adequately considered? | 7. Have ethical issues been taken into consideration? | 8. Was the data analysis sufficiently rigorous? | 9. Is there a clear statement of findings? | 10. How valuable is the research? | CASP <sup>a</sup> quality rating |
|----|-------------------------------------------|-------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------|--------------------------------------------|-----------------------------------|----------------------------------|
| 13 | (Zamudio-Haas et al., 2024) <sup>41</sup> | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 14 | (Sommer et al., 2024) <sup>25</sup>       | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 15 | (Iryawan et al., 2022) <sup>30</sup>      | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 16 | (Monroe et al., 2017) <sup>16</sup>       | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Unclear                                                                                 | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 17 | (Rencken et al., 2021) <sup>42</sup>      | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 18 | (Cook et al., 2018) <sup>26</sup>         | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 19 | (Kako et al., 2021) <sup>11</sup>         | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Yes                                                                                     | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |
| 20 | (Gervolino et al., 2024) <sup>27</sup>    | Yes                                                         | Yes                                          | Yes                                                                         | Yes                                                                      | Yes                                                                   | Unclear                                                                                 | Yes                                                   | Yes                                             | Yes                                        | Yes                               | Strong                           |

<sup>a</sup>CASP: Critical Appraisal Skills Programme

**Table 5:** Sub-themes and themes emerged from studies

| Sub-themes                                                                                            | Themes                                      |
|-------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Seeking connection and support<br>Enhancing knowledge and HIV management skills<br>Confronting stigma | Motivations for joining peer support groups |
| Enhanced emotional and mental well-being<br>Source of inspiration and strength                        | Positive impacts of peer support groups     |
| Issues of stigma and confidentiality<br>Group dynamics and sustainability                             | Challenges in participating                 |

### *Theme 1: Motivations for Joining Peer Support Groups*

The first theme, “Motivations for Joining Peer Support Groups,” explores various reasons that motivate PLHIVs to seek support within similar communities. This theme is constructed from three sub-themes. The sub-theme “Seeking Connection and Support”, reported in 12 out of the 20 included studies, describes how these groups provide a safe space for PLHIV to overcome social isolation, build meaningful relationships, and receive emotional support from individuals with similar experiences. Joining the groups offers opportunities to strengthen friendships, share strengths, and create a sense of acceptance that can reduce feelings of isolation and enhance social security.<sup>25, 26, 28, 30, 31, 33-37, 39, 40</sup> The sub-theme “Enhancing Knowledge and HIV Management Skills”, reported in 8 studies, highlights the motivation of PLHIV to gain accurate information about HIV and practical skills in health management. Through interactions with peers, group members learn essential aspects of HIV care and treatment, such as adherence to ART and are inspired to live productive and positive lives despite challenging conditions.<sup>16, 25, 30-32, 35, 38, 41</sup> Additionally, the sub-theme “Confronting Stigma”, supported by 4 studies, reflects the role of peer support groups in helping PLHIVs combat the social stigma they often face. These groups create an inclusive space where members can share life experiences without fear of judgment, strengthening solidarity and fostering a deeper sense of validation and mutual understanding.<sup>29, 37, 39, 42</sup>

### *Theme 2: Positive Impacts of Peer Support Groups*

The second theme, “Positive Impacts of Peer Support Groups,” illustrates the benefits experienced by PLHIVs through participation in these groups. This theme is built from two sub-themes. The sub-theme “Enhanced Emotional and Mental Well-being”, described in 8 studies, highlights how support groups positively influence their members’ emotional and mental health. Through empathetic interactions, group members feel heard, accepted, and supported in dealing with life’s challenges. For example, several studies describe how the groups help to alleviate depression, enhance self-confidence, and rediscover meaning in life for PLHIV, with support from the group bringing new happiness and prolonging life.<sup>11, 16, 25-27, 29, 34, 41</sup> Additionally, the sub-theme “Source of Inspiration and Strength” emerged in 5 studies, depicting how group members find inspiration through the experiences of peers facing similar challenges. The groups create a supportive environment where members can learn from positive role models, gain encouragement to stay compliant with medication, and feel empowered to continue living optimistically. This support extends beyond emotional reinforcement, creating solidarity that helps the members collectively face stigma and discrimination.<sup>30, 35, 36, 39, 42</sup>

### *Theme 3: Challenges in Participating*

The third theme, “Challenges in Participating” focuses on the obstacles PLHIVs face when participating in peer support groups.



This theme consists of two sub-themes underlining specific aspects of these challenges. The first sub-theme, “Issues of Stigma and Confidentiality,” was discussed in 3 studies, revealing concerns about stigma and privacy violations that can inhibit open participation. Fears of stigma and breaches of privacy often hinder open participation, with concerns about the risks involved and the need to share information with medical professionals reducing the desire to share experiences, compounded by internal conflicts, including internalized stigma, uncertainty about disclosure, and ambivalence toward treatment adherence, which may further intensify the perception of being stigmatized.<sup>29, 35, 39</sup> The second sub-theme, “Group Dynamics and Sustainability,” which was noted in 2 studies, discusses challenges in maintaining the group’s continuity and managing complex interpersonal dynamics within the support group. Challenges in sustaining the group are often exacerbated by financial constraints that hinder the development of activities, while peer influence on using alternative treatments can have serious consequences.<sup>11, 29</sup> For instance, one study described how a peer encouraged another member to abandon ART in favour of herbal remedies, ultimately resulting in a fatal outcome.<sup>29</sup> This study also shows that peer influence, while often positive, may introduce misinformation that contradicts medical advice.<sup>29</sup>

## DISCUSSION

This review study explored and synthesized PLHIVs’ experiences in peer support groups. From the 20 studies analyzed, three themes were identified: Motivations for Joining Peer Support Groups, Positive Impacts of Peer Support Groups, and Challenges in Participating. Each theme highlights different aspects of the support group experience, providing deep insights into how peer support groups influence PLHIVs’ daily lives.

The first theme, Motivations for Joining

Peer Support Groups, describes the primary reasons driving PLHIV to join peer support groups. Motivations to join peer support groups can be understood through the lens of health-related stigma, where PLHIV seek inclusive spaces to regain social belonging and psychological safety as a response to exclusion and discrimination encountered in daily life.<sup>43</sup> PLHIV often face social isolation and stigma that impact their psychosocial well-being.<sup>44</sup> Our meta-synthesis found that peer support groups often provide a safe space for PLHIVs to reduce feelings of isolation and receive emotional support. In addition, peer support groups served as a trusted source of information about HIV management and care. Discussions with peers helped participants gain additional knowledge about HIV, increased their confidence, and supported accurate medical decision-making. This is further supported by a qualitative study showing that peer supporters reinforced accurate health messages and helped clients better understand complex information, thereby promoting better engagement in care decisions.<sup>16</sup> Another motivation was the desire to confront stigma, where peer support groups created a safe space that valued the members’ lived experiences, thus strengthening individual empowerment in resisting social stigma. This pattern is consistent with findings from previous research, which highlighted that safe peer spaces fostered self-acceptance and resilience by enabling individuals to share experiences and develop coping strategies.<sup>45</sup> These findings are further supported by a systematic review that examined peer-led interventions across diverse settings and populations, showing that involving PLHIVs as peers can enhance engagement and retention in HIV care.<sup>46</sup> However, the review also highlighted variation in treatment adherence and health outcomes, indicating that motivational factors may be shaped by contextual and structural differences.<sup>46</sup> These insights reinforce the importance of designing peer support programs that address both individual needs and broader system-level enablers.

The second theme, Positive Impacts of Peer Support Groups, underscores the benefits PLHIVs experienced through participation in these groups. The current meta-synthesis found that peer support groups contributed significantly to improving emotional and mental well-being by providing consistent moral support, reducing stress, and enhancing self-esteem. Participants expressed that the opportunity to share experiences and emotions within the group fostered a sense of comfort and psychological safety, helping them feel valued, accepted, and less alone. Recent studies also support this, showing that peer group environments enhance the individuals' sense of connection, understanding, and confidence in coping with psychosocial challenges.<sup>47, 48</sup> In addition, peer support groups empowered PLHIVs by exposing them to role models within the group who had successfully managed their HIV condition. These role models served as sources of inspiration, fostering optimism, hope, and motivation to persist through life challenges. These findings demonstrate how peer support groups act as social buffers against the reinforcing cycles of internalized and anticipated stigma, enabling PLHIV to rebuild their sense of self-worth, acceptance, and emotional resilience in stigmatizing environments.<sup>49</sup> Studies show that social support, especially affectionate support, positively correlates with a higher quality of life.<sup>50</sup> These findings are consistent with a systematic review of peer-based interventions, which found that such programs contributed to emotional well-being, social connectedness, and improved coping with stigma among PLHIV; however, the magnitude of their impact may vary depending on contextual and structural factors.<sup>46</sup> Our meta-synthesis adds to this body of knowledge by emphasizing how the presence of relatable role models and safe spaces for emotional expression within peer groups enhances psychological resilience and strengthens self-worth.

The third theme, Challenges in Participating, highlights the barriers

encountered by PLHIVs when engaging in peer support groups. One of the primary concerns is the fear of stigma and breaches of confidentiality, as some individuals worry that their personal information might be disclosed or become the subject of gossip, thereby reducing their trust in the group. A recent study found that internalized stigma remained high among PLHIVs despite participation in peer support groups, suggesting that concerns over privacy and social judgment may persist even within supportive settings.<sup>51</sup> These apprehensions are often intensified by the expectation to disclose sensitive health-related experiences, which may discourage open engagement. Interpersonal tensions within the group, such as criticism or gossip, can also undermine the perceived safety of the space and disrupt group cohesion. Another challenge lies in sustaining peer support programs due to limited financial and infrastructural resources, which often hinder the development of consistent and structured group activities. These structural limitations have been identified as critical barriers to stable implementation, especially in contexts where peer support is not institutionally prioritized or adequately funded.<sup>52</sup> Additionally, the presence of group members who promote alternative treatments not aligned with biomedical guidelines may introduce misinformation that poses serious risks. This concern echoes findings from prior qualitative research showing that misinformation shared within peer networks can influence individuals to discontinue ART and pursue unproven alternative treatments, placing them at considerable risk of adverse outcomes.<sup>29</sup> In some cases, such influence may even lead to discontinuation of ART in favour of unproven alternatives, endangering participants' health. These findings are further supported by a recent mixed-methods study conducted in China, which identified concerns about privacy disclosure, psychological pressure, and lack of information as key barriers to participation in online peer support groups among men who have sex with men

living with HIV.<sup>53</sup> The study emphasizes the importance of professional mental health support and high-quality information in facilitating engagement and addressing the internalized stigma that often hinders group participation.<sup>53</sup>

To address these challenges, a recent systematic review emphasizes the need for structured facilitation, role clarity, and support protocols to enhance the safety and sustainability of peer support groups.<sup>54</sup> Evidence also suggests that structured peer support programs that include formal training in communication, trauma-informed care, and restorative practices can foster trust, improve relational skills, and create psychologically safe environments among participants, particularly in high-stress professional settings.<sup>55</sup> Furthermore, psychoeducational and multicomponent interventions, particularly those incorporating group-based reflections on stigma and self-identity, have been found effective in reducing internalized stigma and addressing fears associated with disclosure, even within supportive environments.<sup>56</sup> Our findings reinforce these recommendations and further suggest that programs should include continuous monitoring and capacity-building for peer leaders to ensure accurate information sharing and the ethical management of sensitive health disclosures. Such strategies are crucial for enhancing the sustainability and safety of peer-led interventions, particularly in low-resource settings.

The findings from this study have important implications for strengthening support systems for PLHIVs through peer support groups. Insights into participants' motivations, experienced benefits, and encountered challenges provide a foundation for designing more responsive, inclusive, and evidence-based interventions. These findings emphasize the need to prioritize confidentiality, stigma reduction, structured group facilitation, and psychosocial support tailored to diverse participants' needs. Integrating peer support into existing health systems, through formalized training for peer

leaders, implementation of confidentiality protocols, and ongoing supervision can enhance both program effectiveness and sustainability. These results also contribute to the development of educational materials for PLHIVs, caregivers, and healthcare professionals, which can foster more meaningful engagement in care and community participation.

Nevertheless, this study has several limitations. While all the studies included met minimum quality standards based on CASP appraisal, the wide variation in cultural contexts, healthcare infrastructures, and program implementation across different countries limits the generalizability of the findings. Peer support experiences in high-burden regions such as Sub-Saharan Africa may differ from those in Southeast Asia or Europe due to contextual and systemic differences. In addition, the broad age range of participants, from adolescents to older adults, presents another limitation, as age-specific needs and developmental stages may require distinct peer support approaches. These contextual and demographic heterogeneities should be considered in future research and program planning to ensure interventions are appropriately adapted and equitably beneficial.

## CONCLUSION

This meta-synthesis aimed to identify and synthesize the experiences of PLHIVs participating in peer support groups. The findings revealed three main themes: Motivations for Joining, Positive Impacts of Participation, and Challenges Encountered. Peer support groups play a vital role in fulfilling the social and psychological needs of PLHIV, providing emotional support and aiding in managing the stigma and social isolation often faced by these individuals. However, this study also highlights challenges in the sustainability of peer support groups and confidentiality of information, which can affect the effective engagement of members.

Therefore, more integrated strategies and

ongoing support are necessary to maximize peer support groups' benefits and overcome barriers that may reduce their effectiveness. A deeper understanding of group dynamics and factors influencing participation provides a solid foundation for developing interventions to enhance the well-being and quality of life of PLHIVs. These results also emphasize the importance of confidentiality and a stigma-sensitive approach in designing and implementing peer support groups, ensuring that all members feel safe and valued in sharing their experiences and challenges.

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### Author Contribution

SBS conceived and designed the study. AS and RW conducted the database search, screening, and study selection. AS, RAP, and AA performed the data extraction and prepared the summary tables. SBS, AS, and AA carried out the data analysis and synthesis. SBS drafted the initial manuscript. AS, RAP, RW, TWN, and HA critically reviewed and revised the manuscript. All authors read and approved the final version of the manuscript and agreed to be accountable for the accuracy and integrity of the work.

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### Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this study.

### Declaration on the use of AI

The authors used ChatGPT version 4 (OpenAI, San Francisco, USA) to improve the clarity and grammar of selected sentences. All conceptual content, data analysis, and interpretation were conducted solely by the authors.

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