



## Literature Review

# The Role of Social Support on Resilience in People Living With HIV/AIDS: A Systematic Literature Review

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## ARTICLE INFO

*Submitted* : 12<sup>th</sup> April 2022

*Accepted* : 27<sup>th</sup> June 2022

*Published* : 25<sup>th</sup> July 2022

### *Keywords:*

Social support, HIV/AIDS & Resilience

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## ABSTRACT

During the COVID-19 pandemic, it had a fairly heavy psychological impact, so resilience or resilience was needed, especially for people with HIV/AIDS (PLWHA). This study is to determine the role of social support on resilience in people with HIV/AIDS. Resilience is a person's ability to adapt, survive and thrive in difficult situations. This study used a systematic literature review, which was carried out by means of a systematic review of several articles discussing social support and resilience in people with HIV/AIDS. Article criteria include international publication in English and full text. Article searches were carried out in February 2022 through 4 databases, namely PubMed, Wiley, Proquest, and Springer. Search using keyword ("PLWHA" AND "Social Support" OR "Perceived Social Supports" AND "Resilience" OR "Resiliences"). Articles were analyzed using JBI and Prisma tables. Based on the search for articles in the database, 217 articles were found, then selected through systematic stages so that eight selected journals were obtained. This systematic literature review found that social support was an important factor in increasing resilience in PLWHA. The most influential source of support was support from the family, namely: 30.4%, with (P=0.001). The perceived social support can reduce the impact of stress experienced. With high social support, it can reduce the use of harmful substances and increase ART adherence and contribute to improving the patient's health condition. In conclusion, perceived social support can play an important role, especially in increasing resilience, so it impacts the physical and psychological well-being of people living with HIV/AIDS.



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### INTRODUCTION

HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome) was one of the world's health problems, which required serious attention from various parties, and a holistic approach. The problems experienced by PLWHA are not only physical health problems but also psychosocial problems that are often experienced by them. Therefore, resilience or resilience was needed for PLWHA to be able to adapt. However, if PLWHA has low resilience, it will be difficult to adapt to changing conditions (Pai et al., 2020).

Based on data reported by UNAIDS (2021), the cases of HIV/AIDS in the world reached 37.7 million people. And it was estimated that as many as 680,000-1 million people died of HIV/AIDS. According to WHO data, in 2020, there will be 78% of new HIV infections in the Asia Pacific region. The number of People Living With HIV/AIDS (PLWHA) in Indonesia over the last eleven years reached it was peak in 2021, namely 558,618 cases, 427,201 HIV, and 131,417 AIDS (Direktur Jenderal P2P, 2021).

People with HIV/AIDS were a vulnerable group who experienced several physiological and psychological symptoms, both caused by the disease they were experiencing, as well as the side effects of Antiretroviral (ART) and other drugs related to comorbidities (Ibragimov et al., 2021). This vulnerability exceeded the vulnerability of people with other chronic diseases such as Diabetes Mellitus and Hypertension. Generally, people with HIV/AIDS will experience symptoms such as fatigue, fever, headache, nausea/vomiting, diarrhea, weight loss, pruritus/itching, chills, rash, sweating, dyspnea, cough, muscle aches/joint pain, and lack of sleep (CDC., 2021).

In its development, Antiretroviral treatment (ART) is carried out on people who have been

diagnosed with HIV positive, if treatment is carried out regularly, it can suppress the viral load in the blood, and the CD4 cell count will increase, so as to reduce as well as overcome various complaints that arise. Thus, the Human Immunodeficiency Virus (HIV) disease can be controlled properly (Rooney et al., 2019). Effective symptom management was essential for people with HIV to maintain their quality of life (Gangi et al., 2020).

Another aspect that was needed was social support. Social support is the presence of certain people who personally provide advice and motivation when individuals experience problems (Rzeszutek et al., 2017). For this reason, if there is poor social support and there is rejection and discrimination against PLWHA, it will exacerbate the stressful conditions they experience (Abimbola et al., 2021). Social support increases resilience in PLWHA so that they remain enthusiastic and optimistic in undergoing treatment (Wang et al., 2021). Resilience is an ability possessed by individuals that can be used to overcome difficulties experienced (Connor & Davidson, 2003).

In a study, it was explained that having high resilience was an important factor for individuals to be able to deal with stressful situations and was used as a protective factor for both physical and mental health (Julian et al., 2021). Resilience is very important for PLWHA so that they can assist in the process of adaptation to the conditions of the disease they are experiencing (Wu et al., 2015). High resilience can reduce symptoms of stress and depression (As of et al., 2020).

Efforts to increase resilience/resilience for PLWHA were very important to continue, one of which was through social support (Julian et al., 2021; Huang et al., 2018; Wani, 2020). The problem of decreasing physical health in HIV patients was caused by the psychological impact

experienced (Prabhu et al., 2020). Therefore, the treatment of HIV patients was not enough with a medical approach; a social approach was needed, namely by providing social support. Many studies have described the form of social support, but there were still some differences regarding the most meaningful form of support for PLWHA, especially in increasing resilience for PLWHA. For this reason, this systematic literature review will determine social support's role on resilience in people living with HIV/AIDS.

## METHODS

### Data Source

This literature review study was conducted using PRISMA to determine the role of social support on resilience in people with HIV/AIDS. Article searches were carried out in February 2022 through 4 databases, namely PubMed, Wiley, ProQuest, and Springer. Then the articles are selected through 3 stages. First selected based on duplication of articles from

several sources found. Second, choose articles by reading the title and abstract. The third was by reading the full article.

### Inclusion Criteria

Articles included in this study with the following inclusion criteria: articles with quantitative studies which explain social support and resilience for people with HIV/AIDS, international publication articles so that the articles that will be included in this study were articles of very good quality, articles in English and full text. While the articles that were not included were systematic review articles, literature reviews, and meta-analyses.

### Tracing Strategy

To get articles that match the research topic, the researchers used the keywords ("PLWHA" AND "Social Support" OR "Perceived Social Supports" AND "Resilience" OR "Resiliences"), found 217 articles, and then selected through systematic stages in order to obtain 8 selected journals.

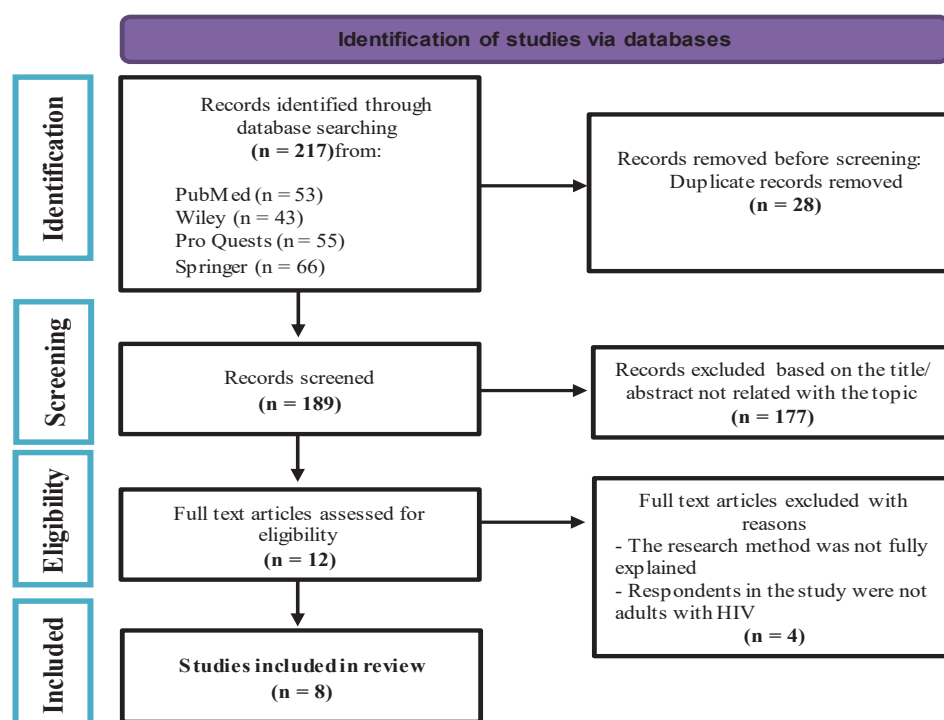


Figure 1. Workflow Literature Searching



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## RESULT

In this systematic literature review based on search results, 217 articles were found and then selected through a rigorous screening process and stages, so that 8 articles were obtained for systematic review. The article discusses social support and resilience in people with HIV/AIDS (PLWHA), as described in the following description:

### Sources of Social Support

Based on the results of research conducted by Xu et al. (2018), 212 people with HIV/AIDS were recruited from the Hospital. From the results of the study, it was explained that support from the family was positively related to resilience. The score for family support was 12.6 (SD = 2.54), while the score for resilience was 13.2 (SD = 2.31). These data show that social support that comes from the family can increase individual resilience. This was in line with the research results (Lyons et al., 2016) in Australia, in 402 men and women living with HIV, subjects aged 18 years and over. The results of the study explain that the support that came from family was 30.4%, close friends 29.8%, and other people 28.4%. Finding this showed that the type of support that had the most significant effect was the support that came from the family with (P=0.001).

Likewise research by Rzeszutek et al. (2017) in 290 people with HIV persons who were receiving care in a voluntary participating hospital, subjects aged 18 years or older, it was explained that family support was positively related to the global PTG (Post Traumatic Grow) score in the follow-up assessment (beta = .38) and for the level of resilience in the first assessment (r = .25). Finding this showed that the form of social support that came from the family has a very important role in increasing their resilience.

Another found (Huang et al., 2018) in China on 160 people with HIV also explained that the results of the study showed that better marital and family relationships were a source of individual resilience and higher well-being. With a source of individual resistance can increased general welfare among PLWHA that was (B = .27, p < .05) physical well-being (B = .25, p < .01) and mental well-being (B = .23, p < .01). There were implications for interventions to increase resilience with the aim of improving the welfare of PLWHA by incorporating interpersonal strategies to strengthen the protective role of marital relations, which play a role in facilitating the process of resilience in PLWHA.

### The Role of Social Support

In the results of research conducted by (Catabay et al., 2019) in 310 people who were recruited at the Hospital. The study results explained that the score with a high level of social support was as much as 35%, and a moderate or high level of resistance was 72%. For each point increase in social support scores (OR = 0.95; 95% CI: 0.91-1.00) and resilience scores (OR = 0.91; 95% CI: 0.85-0.97), there was each decreased the likelihood of experiencing major depressive symptoms. At each point increase in the resilience score, there was a decrease in the likelihood of having major depressive symptoms (OR = 0.92; 95% CI: 0.88-0.97). Social support can reduce mental health effects.

In line with the results of research conducted by (Wen et al., 2020) in 223 people with HIV. The results showed that social support directly affected resilience by 0.11, while a direct effect on depression was 0.19. These findings suggest that social support can increase a person's resilience as well as reduce symptoms of depression. The same thing was also found in the article by (Adamu et al., 2019) that social support is a buffer of resilience so as to prevent the effects of life stress experienced. The results



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showed the average score of social support ( $52.36 \pm 10.17$ ), resilience ( $60.14 \pm 12.67$ ), and perception of stress ( $26.46 \pm 4.81$ ). This finding showed that the relationship between social support and resilience among women with HIV is a significant relationship, as evidenced by ( $P=0.01$ ).

In a study conducted by (Lyons et al., 2016) on 402 HIV people, it was explained that social support from family and close friends mediated resilience with health and well-being for PLWHA. In other research by Hena Khan, 2015) that the average score of social support among men was 46.85(19,00) and girls 44.15(18.89), while the average male endurance score was 29.05(5.79), the female was 29.55(8.08). These findings showed a significant correlation between social support and resilience ( $P=0.01$ ). This was in line with research by Xu et al. (2018) that there was no difference in support from family for male and female respondents, for males 12.6 (2.64), females 12.6 (2.26) with ( $P$ -value 0.85). However, it showed different scores on resilience, with males 13.4 (2.36) and females 12.5 (2.07) with ( $P$ -value 0.02).

From research results by Rzeszutek et al. (2017), the perceived level of support and need for support, expressed in the intensity of seeking support, may also facilitate the use of more adaptive stress coping strategies ( $r = .25$ ). The most common stress coping strategies were meaning-focused coping strategies, particularly positive reassessment (also referred to as positive re-evaluation). Besides that, perceived social support will mediate the relationship between perceived support acceptance and use of the substance. This was in line with the research of Wen et al., 2020) also explained that social support has an indirect effect on increasing ART adherence, which was 0.03 so that it can improve physical health. This was also supported by research by Hena Khan, 2015) that the regression analysis results for the

influence of contributions showed that social support and resilience predicted immunity in PLWHA. Social support accounted for 43.9 percent of the variance in CD4 scores. Meanwhile, resilience accounted for 4.8 percent of the variance in CD4 scores.

## DISCUSSION

Several research results explained that there are several sources of social support for people with HIV/AIDS, including support from family, friends, and other people. However, the support that was most needed and very meaningful for PLWHA was a support that came from the family (Xu et al., 2018). This was because the family was the closest person to their family members, so it became the main source of strength. The presence of the family to provide support was very important so that the individual did not feel alone when facing challenges and difficulties. Likewise explained by (Huang et al., 2018; Luo et al., 2013) that the presence of the family becomes very important for people with HIV to stay close and support each other as they face HIV-related challenges. Adequate family support can encourage the development of the ability to adapt to adversity and maintain a better quality of life.

According to Lipira et al. (2019), family support is a resource that individuals can use to develop resilience. Older PLWHA who received higher levels of family support were more likely to develop resilience that endured aging and improved quality of life. Family traditions in China form an important safety umbrella for PLWHA (Luo et al., 2013), and family members were primary caregivers for medication, psychosocial and financial support, and child care. This was especially true for older PLWHA as they usually have limited social networks and rely heavily on their families to develop strategies for responding to HIV infection and aging, most of

**Table 1.** Characteristics of articles

Title, Author, and Country	Aims	Methods	Sample	Findings
Social support, stress coping strategies, resilience and post-traumatic growth in a Polish sample of HIV-infected individuals: results of a 1-year longitudinal study (Marcin Rzeszutek, Włodzimierz Oniszczenk, Ewa Firla, g-Burcka, 2017). Poland.	This study aimed to investigate post-traumatic growth rates (PTG) and their relationship to levels of social support, stress coping strategies, and resilience among people living with HIV (PLWHA).	Cross-sectional study, the data collection procedure was carried out using a questionnaire instrument	The sample in this study was 290 people who participated voluntarily. Eligibility criteria were PLWHA aged 18 years or older, a confirmed medical diagnosis of HIV infection, and receiving treatment from a hospital. Exclusion criteria included HIV-related cognitive impairment, which was screened by a psychiatrist working in the Hospital where the study was conducted.	<ul style="list-style-type: none"> <li>The results of the study explained that the form of social support comes from family support. And the support felt by PLWHA has a very important role in increasing their resilience.</li> <li>It was found that received support was positively related to the global PTG score in the follow-up assessment (beta = .38) as well as to the level of resilience at the first assessment (r = .25).</li> <li>Perceived level of support and need for support, expressed in the intensity of support seeking, may also facilitate the use of more adaptive stress coping strategies (r = .25)</li> <li>Perceived social support will mediate the relationship between received support and substance use</li> </ul>
<i>Close relationships, individual resilience resources, and well-being among people living with HIV/AIDS in rural China</i> (Huang et al., 2018) China	This study aimed to examine the mediating role of individual resilience resources in the relationship between marital and family relationships with the welfare of PLWHA.	In cross-sectional research, the data collection procedure was carried out using a questionnaire instrument	The sample size was 160 people, and the sample selection randomly selected five villages from among 22 villages where the HIV prevalence was greater than 10% in Henan province, China. Inclusion criteria were: (1) HIV positive, (2) Married more than five years.	<ul style="list-style-type: none"> <li>The results show that better marital and family relationships were a source of higher individual resilience and well-being.</li> <li>With the existence of a source of individual resilience can improve general welfare.(B = .27, p &lt; .05).physical well-being(B = .25, p &lt; .01)and mental well-being(B = .23, p &lt; .01)betweenPLWHA</li> <li>There are implications for interventions to increase resilience with the aim of improving the welfare of PLWHA by incorporating interpersonal strategies to strengthen the protective role of marital relations, which play a role in facilitating the process of resilience in PLWHA</li> </ul>
<i>Perceived stress and mental health: The mediating roles of social support and resilience</i>	This study aims to examine social support and resilience as mediators of the relationship between	Retrospective cohort research design and data collection procedures were carried out using	The sample in this study was 310 black women seeking health services recruited in the waiting rooms of two public STD clinics in the City of Baltimore. The inclusion criteria were as follows :	<ul style="list-style-type: none"> <li>This study found that social support can reduce negative mental health effects</li> <li>It was found that 35% had a high level of social support, and 72% had a moderate or high level of resilience.</li> <li>For each point increase in the resilience score, there was a decrease in the likelihood of having major depressive</li> </ul>



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<p><i>among black women exposed to sexual violence.</i> (Christina J. Catabaya, Jamila K. Stockmana, Jacquelyn C. Campbell, Kiyomi Tsuyuki, 2019).</p>	<p>perceived stress and mental health.</p>	<p>questionnaires, documents, and interviews</p>	<p>biologically female, between the ages of 18-44, self-identifying as Black.</p>	<p>symptoms (OR = 0.92; 95% CI: 0.88–0.97). For each point increase in social support scores (OR = 0.95; 95% CI: 0.91-1.00) and resilience scores (OR = 0.91; 95% CI: 0.85-0.97), there was decreased likelihood of experiencing major depressive symptoms, respectively.</p>
<p><i>United States</i></p>	<p>This study aimed to examine the relationship between resilience, self-esteem, social support, depression, and antiretroviral therapy (ART) adherence in people living with HIV.</p>	<p>The research design is cross-sectional, and the data collection procedure is carried out using a questionnaire instrument</p>	<p>The sample was 223 people, and the sample collection procedure was carried out on patients who visited the hospital regularly. The inclusion criteria were: (1) aged 18 years and over; (2) diagnosed HIV positive; (3) willing to be a respondent</p>	<p>The results showed that social support had a direct effect on the resilience of 0.11, while a direct effect on depression was 0.19. These findings suggest that social support can increase a person's resilience as well as reduce symptoms of depression. In addition, social support was also found to have an indirect effect on increasing ART adherence, which was 0.03.</p>
<p><i>Resilience, self-esteem, self-efficacy, social support, depression, and ART adherence among people living with HIV in Sichuan, China</i> (Wen et al., 2020) China</p>	<p>The purpose of this study was to assess the interrelationships between age, resilience, coping, family support, and quality of life of PLWHA</p>	<p>In a cross-sectional study, the data collection procedure was carried out using a questionnaire instrument</p>	<p>The study sample was 212 PLWHA who were recruited from the Hospital. Eligibility criteria for PLWHA include PLWHA who are at least 50 years old and able to participate in face-to-face interviews.</p>	<p>The results showed that family support was positively related to resilience. Family support score 12.6 (SD = 2.54), score for resilience or resilience 13.2 (SD = 2.31). Thus support that comes from the family can increase individual resilience. The support from the family for male and female respondents did not show any difference, for males 12.6 (2.64), females 12.6 (2.26) with (P-value 0.85). But showed different scores on resilience, male 13.4 (2.36), female 12.5 (2.07) with (P-value 0.02).</p>
<p><i>Ageism, resilience, coping, family support, and quality of life among older people living with HIV/AIDS in Nanning, China</i> (Xu et al., 2018) China</p>	<p>This study aims to provide a complete picture of resilience and mental health</p>	<p>Cohort study design, the data collection procedure was carried out using</p>	<p>A sample of 402 men and women living with HIV, aged 18 years and over, and residents in Australia identified as gay men, reflecting the demographic</p>	<p>The results of the study explained that the type of support that has the most significant effect is the support that comes from 30.4% from family, 29.8% from close friends, 28.4% from other people, with P=0.001. Social support from family and close friends mediated resilience with health and well-being for PLWHA.</p>
<p><i>Psychosocial Factors Associated with Resilience in a National Community-Based Cohort of Australian Gay Men Living with HIV</i> (Anthony Lyons, Wendy</p>				



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Heywood, Tomas Rozbroj, 2016) Australia	among HIV-positive gay men	a questionnaire instrument	distribution of HIV infection in Australia	<ul style="list-style-type: none"> <li>The results of the study obtained an average score of social support (52.36 ± 10.17), resistance (60.14 ± 12.67), stress perception (26.46 ± 4.81)</li> <li>These findings indicate that the relationship between social support and resilience among women with HIV showed a significant relationship with (P=0.01)</li> <li>Social support is a buffer of resilience so as to prevent the effects of life stress experienced.</li> </ul>
Stress, social support, and resilience among women living with HIV in Nigeria (Aliyu Adamu, Gugu Mchunu, Joanne R. Naidoo, 2019). Nigeria	The aim of this study was to explore the relationship between social support, HIV-related psychological stress, and resilience among women living with HIV	The research design is cross-sectional, and the data collection procedure is carried out using a questionnaire instrument	The sample in this study was WLWH, as many as 748 people who attended three selected hospitals in the state of Niger, Nigeria. The inclusion criteria were as follows: participants had to be women diagnosed with HIV for not less than 4 months, were 18 years and over, and had not been on ART for less than 3 months.	<ul style="list-style-type: none"> <li>The number of samples was 40 people living with HIV, with criteria ranging from 21 to 55 years old, taking ARV drugs or antiretroviral therapy (ART) for a duration of at least six months.</li> <li>The sample was selected by purposive sampling.</li> </ul>
Effect of Resilience and Social Support on Immune - Activation in HIV-Positive People (Hena Khan, 2015) India	The aim of the study was to examine the effect of resilience and social support factors on immune activation among people with symptoms of HIV and AIDS.	In cross-sectional research, the data collection procedure was carried out using a questionnaire instrument	The number of samples was 40 people living with HIV, with criteria ranging from 21 to 55 years old, taking ARV drugs or antiretroviral therapy (ART) for a duration of at least six months.	<ul style="list-style-type: none"> <li>The results obtained the average score of social support between men 46.85 (19.00) and girls 44.15 (18.89), while the average endurance score for males is 29.05 (5.79) for females 29.55 (8.08).</li> <li>These findings showed a significant correlation between social support and resilience with (P=0.01)</li> <li>The regression analysis results for the influence of contributions showed that social support and resilience predict immunity in PLWHA.</li> <li>Social support accounted for 43.9 percent of the variance in CD4 scores. Meanwhile, resilience accounted for 4.8 percent of the variance in CD4 scores.</li> </ul>





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whom disclose their HIV status to their partners and other family members. (Zang et al., 2014). However, families can not meet all the social and medical needs of PLWHA. They may seek support from others, especially medical professionals, outside the family. However, support from family became the most important thing for people with HIV.

Social support played an important role in increasing resilience, as several articles have found (Rzeszutek et al., 2017; Huang et al., 2018; Catabay et al., 2019; Wen et al., 2020) explained that social support came from the family as a buffer for high resilience. If the perceived support is high, then a person's resilience will also be high. The role of social support in increasing resilience has a positive effect on people living with HIV/AIDS, including from research by Wen et al., (2020) that social support has a direct effect on depression 0.19. These findings suggested that social support can increase a person's resilience as well as reduce symptoms of depression. When the resilience of people living with HIV develops and increases, the individual will show optimism and positive thinking so that it will create a calm atmosphere and reduce psychological symptoms such as stress and depression. Adamu et al. (2019) also explained that social support is a buffer of resilience so as to prevent the effects of life stress experienced.

In addition, social support was also an intermediary in reducing the use of drugs and harmful substances. As explained by Rzeszutek et al. (2017), social support increased resilience and contributed to preventing the use of harmful substances. A study revealed that psychosocial stress among PLWHA may be related to socioeconomic status, poor family and support systems, stigma, and discrimination. (Aransiola et al., 2014) increasing resilience is a very important thing that must be improved to prevent mental health problems and improve health and well-being (Lyons et al., 2016). Therefore,

social support was very important because of the presence of someone, both family and friends, who provide support for PLWHA, so that they can share with each other and can create positive feelings and not feel lonely, so as to reduce the psychological symptoms they feel. As a result, people with HIV did not need more sedatives. Besides, according to Wen et al., (2020), good social support will form good resilience and can positively increase adherence to ART therapy. This was in line with Hena Khan (2015) that social support also contributed to an increase in the CD4 count of people living with HIV/AIDS.

The limitations of this study include the number of articles used in 8 articles, besides that the results of this study were not strong enough to conclude a causal relationship between social support and resilience in people living with HIV/AIDS because the articles obtained were generally cross-sectional, although there were several articles. Others used a cohort study. Meanwhile, the strength of this research was that it went through a systematic literature review process, starting from determining keywords to searching for literature and then filtering and selecting quality articles that can meet the requirements for critical appraisal. For this reason, further research was needed on social support and resilience with an approach of *Randomized Controlled Trial* (RCT) to find an accurate causal relationship between these variables.

## CONCLUSION

Based on a systematic literature review process that has been carried out, several things can be concluded. The first sources of social support came from family, friends, and other people. But the most felt source of support is support coming from the family by 30.4%. Finding this showed that the type of support that had the most significant effect was the support that came from the family with (P=0.001). The



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family was the closest person family member, so they became the main source of strength. The presence of the family to provide support was very important so that the individual did not feel alone when facing challenges and difficulties.

The second is the role of social support in increased resilience in PLWHA. Social support from family and close friends mediated resilience with health and well-being for PLWHA because social support acted as a buffer for an individual's resilience so as to prevent the effects of life's stressors. Perceived support may also facilitate the use of more adaptive stress coping strategies ( $r = .25$ ) to prevent and suppress the impact of psychological stress felt by PLWHA so that they can demonstrate the ability to adapt to change and rise and thrive in difficult situations experienced. It will have an effect on reducing the use of drugs or harmful substances. Social support has an indirect effect on increasing ART adherence, which was 0.03 so that social support and resilience predict immunity in PLWHA.

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