

## THE RELATIONSHIP BETWEEN FAMILY SUPPORT AND COMPLIANCE WITH ARV (ANTIRETROVIRAL) TREATMENT PROGRAMS IN PATIENTS WITH HIV-AIDS AT THE SEROJA CLINIC RSUD DR. ADJIDARMO LEBAK YEAR 2023

Lilis Istanti \*, Isnaeni

Sekolah Tinggi Ilmu Kesehatan Abdi Nusantara

Jl. Swadaya No.7, RT.001/RW.014, Jatibening, Kec. Pd. Gede, Kota Bks, Jawa Barat 17412, Indonesia

Email: [stefannylilis@gmail.com](mailto:stefannylilis@gmail.com)

### Abstract

**Background:** Human Immunodeficiency Virus (HIV) A virus that infects white blood cells, causing a decrease in the body's resistance and making it easier for infectious diseases to occur. Family support is one factor that can increase compliance in ARV treatment programs in patients with HIV-AIDS. **Purpose:** The aim of this research is to determine the relationship between family support and adherence to ARV treatment programs in patients with HIV-AIDS at the Seroja Clinic, RSUD dr. Adjidarmo, Lebak Regency. **Methods:** This research method is a type of quantitative research design cross-sectional with a non-experimental analytical design with a sample size of 58 respondents and sampling using purposive sampling techniques. The data analysis method used is test crosstab chi-square. **Results:** There is a significant relationship between family support and compliance in carrying out the ARV treatment program with a p-value of 0.000 ( $p < 0.05$ ) and with a value of Odd Ratio (OR)= 51,333. There is a relationship between emotional support and compliance with the treatment program,  $p = 0.000$  ( $p < 0.05$ ) OR=27,000, instrumental support with treatment program  $p = 0,000$  ( $p < 0.05$ ), OR= 32,667, information support with treatment programs  $p = 0.000$  ( $p < 0.05$ ) OR=27,000 award support with treatment program  $p = 0.000$  ( $p < 0.05$ ), OR=19,286 and network support with treatment programs  $p = 0,000$  ( $p < 0.05$ ) OR=14,000. **Conclusion:** There was a significant relationship between family support and compliance in carrying out the ARV treatment program. Future research is expected to examine other factors that can increase compliance in carrying out ARV treatment programs in patients with HIV-AIDS.

**Keywords:** ARV Treatment, Compliance, Family Support, HIV-AIDS

### Introduction

Along with the increase in population, the health problems faced also increase. One of the health problems that is still a health problem at the world level is disease Human Immunodeficiency Virus (HIV). HIV is a virus that infects white blood cells which causes a decrease in human immunity, making it easier for various infectious diseases to occur (Ministry of Health of the Republic of Indonesia, 2023).

According to World Health Organization (WHO) in 2021 the number of HIV sufferers will be 38.4 million and will increase to 39 million in 2022 (WHO, 2023). The majority of HIV sufferers are African countries, namely 25.6 cases, America and Southeast Asia are both in second place, with 3.8 million cases, and Europe is in third place with 2.8 million cases (Azkhia, 2022).

Southeast Asian countries are the second countries with the most HIV cases at the global level. An estimated 3.9 million people are living with HIV in 2022 and who have received antiviral treatment that is around 2.5 million (61%). It is estimated that around 85 thousand sufferers die from the HIV virus (WHO, 2023).

Based on data from the executive report of the Indonesian Ministry of Health in 2022 in Indonesia, it is estimated that 329,581 people suffer from HIV and as many as 137,397 cases suffer from HIV-Acquired Immune Deficiency Syndrome (AIDS). Even though this figure has decreased from last year, the rate of discovery of new cases and the death rate are still quite high. In 2022 the number of new HIV sufferers will be around 25,740 and those who will die from HIV-AIDS will increase by 121.37 % from 11,971 people in 2010 to 26,501 people in 2021 (Afriana et al., 2022). The HIV incidence rate for men is higher (70%) than for women (30%) (Indonesian Ministry of Health, 2023)

Based on reports from the Banten Provincial Health Service, in 2022 the number of HIV sufferers will reach 17,680 cases and Tangerang Regency is the city with the most HIV cases, namely 4,363 cases, followed by Tangerang City, namely 3,497 cases, while Lebak Regency is in 6th place with 613 cases (Rasyid & Reni, 2023). Based on data from Medical Record Dr. Hospital Adjidarmo, from January to August 2023, the number of HIV sufferers reached 294 people and those who had undergone treatment were around 254, but there were a number of people undergoing routine treatment. 109 people per month.

Antiretroviral (ARV) treatment for HIV patients is one of the programs in controlling HIV. For sufferers who regularly take ARVs, their quality of life will improve because the virus will be suppressed and will not infect other people and will reduce the risk of a collection of symptoms of infection due to decreased immunity (AIDS) (Ministry of Health of the Republic of Indonesia, 2023). ARV treatment is very important for HIV sufferers, but there are still many HIV sufferers who do not want to undergo routine treatment. According to the executive report of the Indonesian Ministry of Health (2022), sufferers who received ARV treatment were 160,259 people out of the estimated number of people with HIV (PLHIV) of 543,100 people and only 23,075 (14%) who regularly took ARV medication as shown by the results Viral Load (VL) tersupresi (virus tersupresi).

One factor that can influence ARV treatment behavior in HIV sufferers is family support. Family support is needed by HIV sufferers to be motivated and able to follow the recommendations of health workers, especially in ARV treatment (Supriyatni et al., 2023). The results of research (Prasetyo & Qur, 2022), show that there is a significant influence between family support and ARV treatment behavior for HIV sufferers with a p-value of 0.011. Likewise, research conducted by (Adnan Dalfian et al., 2021), shows that there is an influence between family support and ARV treatment for HIV patients. The results show that sufferers who receive family support are more compliant in ARV treatment with a p-value of 0.007, and an OR of 4.57. The results of a preliminary study conducted at the Seroja clinic at Dr. Adjidarmo Hospital, Lebak Regency, showed that the majority of sufferers did not receive family support in carrying out the ARV treatment program. The aim of this research is to determine the relationship between family support and adherence to the ARV treatment program in patients with HIV-AIDS at the Seroja Clinic, RSUD dr. Adjidarmo Lebak Regency in 2023.

## **Research methods**

### **1.1 Research design:**

This research is a type of quantitative research by design cross sectional with a non-experimental analytical design which aims to find the relationship between family support and adherence to ARV treatment programs in patients with HIV-AIDS at the Seroja Clinic, Dr. Adjidarmo Hospital, Lebak-Banten in 2023.

### **1.2 Setting and Samples:**

The research will be conducted at the Seroja Clinic, dr. Adjidarmo Hospital, Lebak-Banten. Adjidarmo Lebak Banten. The research time is one month from November 15 - December 15 2023. The sample in this study was 58 respondents using the sampling technique, by using purposive sampling technique.

### 1.3 Measurement and Data Collection

Data collection in this research was through a questionnaire instrument. The instrument in this research is a questionnaire family support and ARV treatment program compliance questionnaire adopted from Kusuma (2011) in Habibulloh (2022). Questionnaires that have been distributed to respondents are then carried out editing to check whether the observation sheet has been filled in properly. Observation sheets that have been filled in properly are carried out coding to make it easier to enter data into computerized programs. Data analysis was carried out using the computerized SPSS program (Statistical Product and Service Solution) to see the distribution of characteristics of respondents suffering from HIV-AIDS, family support and patient compliance with the ARV treatment program for patients with HIV-AIDS. The collected data is analyzed statistically using analysis chi square to find out whether there is a relationship between family support and adherence to ARV treatment programs in patients with HIV-AIDS (bivariate analysis).

### 1.4 Analisis Data

Data analysis used in this research uses univariate analysis and bivariate analysis. Univariate analysis was carried out to analyze respondent distribution variables (age, gender, education, length of time infected with HIV-AIDS), family support variables and ARV treatment program compliance variables. Bivariate analysis was carried out to analyze the relationship between family support and adherence to ARV treatment programs in patients with HIV-AIDS. Bivariate analysis was carried out using nonparametric statistical tests chi square

### 1.5 Ethical Considerate

Before doing presearch, the researcher provides an explanation to potential respondents about the aims and objectives of the research, if the potential respondent agrees to take part in the research then the potential respondent is required to sign an informed consent. This research has received research permission from the Head of the Abdi Nusantara Health Sciences Institute Nursing Study Program which was shown to the head of education and training at RSUD Dr. Ajidarmo Lebak and distributed to HIV sufferers undergoing treatment at the Seroja Clinic RSUD.dr. Ajidarmo Lebak. This research used 37 references from 2007 to 2023.

## Research result

### a. Univariate Results

#### Distribution of Respondents Based on Age

**Table 1. Distribution of respondents according to age**

| Age (years)                   | Number (n) | Percent (%)  |
|-------------------------------|------------|--------------|
| Late Teenagers (17-25 years)  | 9          | 15.50        |
| Early Adulthood (26-35 years) | 39         | 67.30        |
| Late Adulthood (36-45 years)  | 10         | 17.20        |
| <b>Total</b>                  | <b>58</b>  | <b>100.0</b> |

Based on the table above, it shows that the distribution of respondents based on age is in late adolescence (17-25 years), namely 9 (15.50%), early adulthood (26 years -35 years), namely 39 (67.30%) and late adulthood (36-45 years). 10 (17.20%). The results above show that the distribution of respondents based on age is mostly in early adulthood.

## Distribution of Respondents by Gender

**Table 2 Distribution of Respondents by Gender**

| Gender       | n         | Percent (%)  |
|--------------|-----------|--------------|
| Man          | 36        | 62.10        |
| Woman        | 22        | 37.90        |
| <b>Total</b> | <b>58</b> | <b>100.0</b> |

The table above shows 36 (62.10%) male respondents and 22 (37.90%) female respondents. This shows that the majority of respondents are men.

## Distribution of Respondents Based on Education

**Table. 3 Distribution of respondents based on education**

| Education          | Number (n) | Percent (%)  |
|--------------------|------------|--------------|
| Elementary school  | 6          | 10.30        |
| Junior High School | 14         | 24.10        |
| SMA                | 28         | 48.30        |
| College            | 8          | 13.80        |
| No School          | 2          | 3.40         |
| <b>Total</b>       | <b>58</b>  | <b>100.0</b> |

Based on the table above, it shows the distribution of respondents based on education, namely, respondents with elementary school (SD) education, 6 (10.30%) respondents, junior high school 14 (24.10%) respondents, high school 28 (48.30%) respondents. Higher education 8 (13.80%) and no school 2 (3.40), this shows that the majority of respondents have a high school education level.

## Distribution of Respondents Based on Occupation

**Table 4 Distribution of respondents by occupation**

| Work          | Number (n) | Percent (%)  |
|---------------|------------|--------------|
| State Officer | 2          | 3.40         |
| Laborer       | 7          | 12.10        |
| trader        | 3          | 5.20         |
| Self-employed | 14         | 24.10        |
| Doesn't work  | 32         | 55.20        |
| <b>Total</b>  | <b>58</b>  | <b>100.0</b> |

Based on the table above, it shows the distribution of respondents based on occupation, namely, civil servants 2 (4.40%) respondents, laborers 9 (12.10%) respondents, traders 3 (5.20%) respondents, self-employed 14 (24%), not working 32 (55.20%) ) respondents. This shows that the majority of respondents do not work.

## Distribution of Emotional Support, Instrumental, Information, Rewards, Social Networks

**Table 5. Distribution of Emotional, Instrumental, Information, Rewards and Social Network Support**

| Family support | Emotional |       | Instrumental |       | Information |       | Award |       | Social network |       |
|----------------|-----------|-------|--------------|-------|-------------|-------|-------|-------|----------------|-------|
|                | n         | %     | n            | %     | n           | %     | n     | %     | n              | %     |
| Good           | 25        | 43.10 | 31           | 53.40 | 30          | 51.70 | 31    | 53.40 | 34             | 58.60 |
| Not good       | 33        | 56.90 | 27           | 46.60 | 28          | 48.30 | 27    | 46.60 | 24             | 41.40 |
| Total          | 58        | 100.0 | 58           | 100.0 | 58          | 100.0 | 58    | 100.0 | 58             | 100.0 |

Based on the table above, it shows that the distribution of emotional support is good 25 (43.10%), poor 33 (56.90%), instrumental support, good 31 (53.40%), poor 27 (46.60%), information support, good 30 (51.70%) , poor 28 48.30%), reward support, good 31 (53.40%), poor 27 (46.60%) and social network support, good 34 (58.60%), poor 24 (41.40%). This shows that the majority of respondents are not good at getting support related to emotional support and good at getting instrumental support, information, appreciation and social network support.

## Distribution of Family Support

**Table 6. Distribution of Family Support**

| Family support | Number (n) | Percent (%) |
|----------------|------------|-------------|
| Good           | 30         | 51.70       |
| Not good       | 28         | 48.30       |
| Total          | 58         | 100.00      |

Based on the table above, it shows that the distribution of respondents based on family support is good, 30 (51.70%), not good (48.30%). This shows that the majority of respondents received good family support.

## Distribution of treatment program compliance rates

**Table 7. Distribution of treatment program compliance**

| Treatment Compliance | Number (n) | Percent (%)  |
|----------------------|------------|--------------|
| Comply               | 34         | 58.60        |
| Less Compliant       | 24         | 41.40        |
| <b>Total</b>         | <b>58</b>  | <b>100.0</b> |

Based on the table above, it was found that the respondents who were compliant with the treatment program were 34 (58.60%) and the respondents who were less compliant with the treatment were 24 (41.40%). This shows that the majority of respondents adhere to the ARV treatment program.

## b. Bivariate Results

### The relationship between emotional support and treatment program compliance

**Table 8. Relationship between emotional support and treatment program compliance**

| Emotional Support | Treatment compliance |       |             |       | Total |       | OR     | p     |
|-------------------|----------------------|-------|-------------|-------|-------|-------|--------|-------|
|                   | Comply               |       | Disobedient |       |       |       |        |       |
|                   | n                    | %     | n           | %     | N     | %     |        |       |
| Good              | 25                   | 43.10 | 0           | 0     | 25    | 43.10 | 27.000 | 0.000 |
| Not good          | 9                    | 15.52 | 24          | 41.38 | 33    | 56.90 |        |       |
| Total             | 34                   | 58.62 | 24          | 41.38 | 58    | 100   |        |       |

The table above shows that of the 58 respondents who received good family emotional support and were obedient to carrying out the treatment program, there were 25(43.10%) respondents and those who received less support but were obedient to carrying out the treatment program were 9 (15.15%) respondents. Meanwhile, respondents who were not good at getting emotional support were not compliant with the treatment program, namely 24 (41.38%) respondents. This shows that the majority of respondents received good emotional support and complied with the treatment program. Analysis results chi square The obtained value of  $p = 0.000$  ( $p < 0.005$ ) shows that there is a significant relationship between family emotional support on compliance with the ARV treatment program in HIV-AIDS patients at the Seroja Clinic, Dr. Adjidarmo Lebak Hospital, with the value Odd Ratio (OR=27.00).

### The Relationship Between Instrumental Support and Treatment Program Compliance

**Table 9. Instrumental support with treatment program compliance**

| Instrumental Support | Treatment compliance |              |                |              |           | Total         | OR     | p     |
|----------------------|----------------------|--------------|----------------|--------------|-----------|---------------|--------|-------|
|                      | Comply               |              | Less Compliant |              | N         |               |        |       |
|                      | n                    | %            | n              | %            |           |               |        |       |
| Good                 | 28                   | 48.28        | 3              | 5.17         | 31        | 53.45         | 32.667 | 0.000 |
| Not good             | 6                    | 10.34        | 21             | 36.21        | 27        | 46.55         |        |       |
| <b>Total</b>         | <b>34</b>            | <b>58.62</b> | <b>24</b>      | <b>41.38</b> | <b>58</b> | <b>100.00</b> |        |       |

The table above shows that of the 58 respondents who received good instrumental support from the family and adhered to the ARV treatment program for HIV-AIDS patients, there were 28 (48.28%) respondents and respondents who received poor instrumental support and adhered to the treatment program were 6 (10.34%). Meanwhile, 3 (5.17%) respondents who received good support and did not comply with the treatment program and 21 (36.21%) respondents who received poor support and did not comply with the treatment program. This shows that the majority of respondents received good instrumental support and adhered to the treatment program. Analysis results chi square The value obtained was  $p = 0.000$  ( $p < 0.005$ ), this shows that there is a significant relationship between family instrumental support and adherence to ARV treatment programs in HIV-AIDS patients with an OR value of 32.667.

## The relationship between family information support and compliance with treatment programs

**Table 10. Informational support with treatment program compliance**

| Information support | Treatment compliance |       |                |       | Total |       | OR     | p     |
|---------------------|----------------------|-------|----------------|-------|-------|-------|--------|-------|
|                     | Comply               |       | Less Compliant |       |       |       |        |       |
|                     | n                    | %     | n              | %     | N     | %     |        |       |
| Good                | 27                   | 46.55 | 3              | 5.17  | 30    | 57.72 | 27.000 | 0.000 |
| Not good            | 7                    | 12.67 | 21             | 36.21 | 28    | 48.28 |        |       |
| Total               | 34                   | 58.62 | 24             | 41.38 | 58    | 100   |        |       |

Based on the table above, it shows that of the 58 respondents who had good information support and complied with the treatment program, there were 27 (46.55%) respondents and respondents who received poor information support but complied with the treatment program were 7 (12.67%). Meanwhile, respondents who received good information support but did not comply with the treatment program were 3 (5.17%) and respondents who received poor information support and did not comply with the treatment program were 21 (36.21). This shows that the majority of respondents received good information support and adhered to the treatment program. Analysis results chi square The obtained p value = 0.000 ( $p < 0.005$ ) shows that there is a significant relationship between information support and the ARV treatment program for HIV-AIDS patients at the Seroja Clinic, Dr. RSUD. Ajidarmo Lebak with an OR value of 27,000.

## The Relationship between Reward Support and Treatment Program Compliance

**Table 11. Relationship between reward support and treatment program compliance**

| Award Support | Treatment compliance |       |                |       | Total |       | OR     | p     |
|---------------|----------------------|-------|----------------|-------|-------|-------|--------|-------|
|               | Comply               |       | Less Compliant |       |       |       |        |       |
|               | n                    | %     | n              | %     | N     | %     |        |       |
| Good          | 27                   | 46.55 | 4              | 6.90  | 31    | 53.45 | 19.286 | 0.000 |
| Not good      | 7                    | 12.67 | 20             | 34.48 | 27    | 46.55 |        |       |
| Total         | 34                   | 58.62 | 24             | 41.38 | 58    | 100   |        |       |

Based on the table above, it shows that of the 58 respondents who received good reward support and complied with the treatment program, there were 27 (46.55%) respondents, and 7 (12.67%) respondents who received poor reward support but complied with the treatment. Meanwhile, there were 4 (6.90%) respondents who received good reward support but were not compliant with the treatment program and 20 (34.48%) respondents who received poor reward support and were less compliant with treatment. This shows that the majority of respondents received good support and were compliant with the treatment program. Analysis results chi square It was found that the p value = 0.000 with an OR value of 19.286.

## The Relationship Between Social Network Support and Treatment Program Compliance

**Table 4. The relationship between social network support and treatment program adherence**

| Network support | Treatment compliance |       |                |       | Total |       | OR     | p     |
|-----------------|----------------------|-------|----------------|-------|-------|-------|--------|-------|
|                 | Comply               |       | Less Compliant |       |       |       |        |       |
|                 | n                    | %     | n              | %     | N     | %     |        |       |
| Good            | 28                   | 48.28 | 6              | 10.34 | 34    | 58.62 | 14.000 | 0.000 |
| Not good        | 6                    | 10.34 | 18             | 31.03 | 24    | 41.38 |        |       |
| Total           | 34                   | 58.62 | 24             | 41.38 | 58    | 100   |        |       |

Based on the table above, it shows that of the 58 respondents who received good social network support and complied with the treatment program, there were 28 (48.28%) respondents, and respondents who received poor social network support but complied with the treatment were 6 (10.34%) respondents. Meanwhile, there were 6 (10.34%) respondents who received good social network support but did not comply with the treatment program and 18 (31.03%) respondents who received poor social network support and did not comply with the treatment program. This shows that the majority of respondents received good social network support and adhered to the treatment program. Analysis resultschi square It was found that the p value = 0.000 with valueOR 14.000.

## The relationship of family support to treatment program compliance

**Table 13. Relationship between family support and treatment programs**

| Family support | Treatment compliance |              |                |              | Total     |            | OR     | p     |
|----------------|----------------------|--------------|----------------|--------------|-----------|------------|--------|-------|
|                | Comply               |              | Less Compliant |              |           |            |        |       |
|                | n                    | %            | n              | %            | N         | %          |        |       |
| Good           | 28                   | 48.28        | 2              | 3.45         | 30        | 51.72      | 51.333 | 0.000 |
| Not good       | 6                    | 10.34        | 22             | 37.93        | 28        | 48.28      |        |       |
| <b>Total</b>   | <b>34</b>            | <b>58.62</b> | <b>24</b>      | <b>41.38</b> | <b>58</b> | <b>100</b> |        |       |

Based on the table above, it shows that of the 58 respondents who received good family support and complied with the treatment program, there were 28 (48.28%) respondents, and respondents who received poor family support but complied with the treatment were 6 (10.34%) respondents. Meanwhile, respondents who received good family support but did not comply with the treatment program were 3 (3.45%) and respondents who received poor family support and did not comply with the treatment program were 22 (37.93%). This shows that the majority of respondents received good family support and complied with the treatment program. Analysis resultschi square It was found that the p value = 0.000 with valueOR 51.333.



## Discussion

The relationship between emotional support and treatment program compliance. Based on analysis of the relationship between emotional support and the ARV treatment program for HIV-AIDS sufferers at the Seroja clinic, RSUD dr. Ajidarmo found that the majority of respondents were not good at getting emotional support, namely 33 (56.90%). Respondents who were not good at getting emotional support were mostly non-compliant with the treatment program, namely 24 (41.38%). Emotional support is needed by HIV-AIDS sufferers for the continuation of the ARV therapy program because the family is the person closest to the patient who always monitors and supervises and provides motivation and encouragement when the patient begins to lose enthusiasm in participating in the therapy program. Hardiyatmi (2016)) in Yuldensia et al., (2018). Analysis results chi square obtained a p-value of 0.000 ( $p < 0.005$ ) with an OR value of 27,000. These results show that there is a significant relationship between family emotional support and the level of compliance with the ARV treatment program for patients with HIV at the Seroja Clinic, RSUD dr. Ajidarmo Lebak where respondents who received good emotional support from their families were 27 times more compliant with carrying out the ARV treatment program. This result is in line with the research results of Audhah & Agustina, (2016), where the results of this study were that patients who received good emotional support underwent treatment more regularly and respondents who were less good received less routine support in carrying out treatment with a p-value of 0.01 ( $p < 0.05$ ).

Results of crosstab analysis between family instrumental support and adherence to ARV treatment programs in HIV-AIDS patients at the Seroja Clinic, RSUD dr. Ajidarmo found that patients who received good instrumental support were more compliant with treatment. Analysis results chi square obtained a p value of 0.000 ( $p < 0.05$ ) with value OR 32,667. This shows that there is a significant relationship between instrumental support and adherence to ARV treatment programs in HIV-AIDS patients, where patients who receive good instrumental support 32 will be more adherent to the treatment program. Instrumental support from the family is the support that patients with HIV-AIDS need, this support is needed for the survival of HIV sufferers. Families can provide assistance in the form of necessary materials needed by sufferers, for example medicine, clothing and shelter (Kurnia, 2018). Instrumental support provided by families to HIV-AIDS patients can improve the sufferer's quality of life.

Information support is needed by HIV-AIDS sufferers to increase compliance in carrying out ARV treatment programs. Information support will help HIV-AIDS sufferers to increase their knowledge about matters related to HIV-AIDS. The family as part of the sufferer can provide information or suggestions that can help the patient in dealing with his condition. The research results of Khairunnisa, (2015), show that information support is effective in improving the quality of life of PLWHA. The results of this study showed that information support was significantly related to compliance with the ARV treatment program for HIV-AIDS patients at the Seroja Clinic, RSUD dr. Ajidarmo Lebak, where the results of the chi square analysis between information support and ARV treatment program compliance obtained a value of  $p=0.000$  ( $p < 0.05$ ) where respondents who received good information support 27 would be more compliant in carrying out the treatment program (Odd Ratio=27.000).

Appreciative support is support provided by families to HIV-AIDS sufferers by providing positive support for the individual's ideas or feelings related to their disease condition. HIV-AIDS sufferers will feel appreciated and will not feel discriminated against when suffering from HIV-AIDS, where this disease has a negative stigma from society. Sufferers also feel that they also have the same rights as healthy family members to express what they feel (Agustiani et al., 2023). The results of this study show that there is a significant relationship between appreciation support and compliance with the ARV treatment program for patients with HIV-AIDS at the Seroja Clinic, RSUD dr. Ajidarmo Lebak, where are the results of the analysis chi square Between reward support and treatment program compliance, the

value of  $p = 0.000$  ( $p < 0.05$ ) was obtained. Respondents who received good appreciation support 19 would be more compliant in carrying out the ARV treatment program (Odd Ratio 19.286).

Social network support is support provided by families to HIV-AIDS sufferers by giving sufferers the freedom to interact with other people. HIV-AIDS sufferers are thought to be able to transmit the disease to other people through bodily contact or just by touching, so they are often ostracized and not allowed to socialize with their surroundings. Families also often consider HIV-AIDS to be a shameful disease. Families who provide good social network support will be able to increase self-acceptance of patients with HIV-AIDS. The results of Djalaluddin's research, (2018), show that there is a significant relationship between social network support and self-acceptance for HIV-AIDS sufferers, where the results of the chi square analysis between social network support and self-acceptance obtained a value of  $p = 0.000$  ( $p < 0.05$ ). The research results showed that the majority of respondents received good social network support and adhered to treatment. Analysis results chi square The value obtained was  $p = 0.000$  ( $p < 0.05$ ), which shows that there is a significant relationship between social network support and adherence to ARV treatment programs in patients with HIV-AIDS at the Seroja Clinic, Dr. Adjidarmo Hospital, Lebak.

Based on the results of research on family support, it was found that respondents received good family support and most of them complied with the ARV treatment program for HIV-AIDS patients at the Seroja Clinic, RSUD dr. Adjidarmo Lebak. Analysis results chi-square obtained a  $p$  value = 0.000 ( $p < 0.05$ ) and an OR value of 51.333. This shows that family support plays a very important role in the level of compliance with ARV treatment programs for patients with HIV-AIDS, where respondents who receive family support 51 will be more compliant in carrying out ARV treatment programs. Family support is one of the factors that can increase the success of ARV treatment programs for patients with HIV-AIDS. The results of this study are in line with research by Chreyst Debby et al., (2019), where the majority of respondents who received positive family support and had a good level of adherence to taking ARV medication was 72 (53.70%). Results of the analysis chi square The  $p$ -value obtained was 0.034 ( $p < 0.05$ ), this shows that there is a significant relationship between family support and adherence to taking ARV medication in HIV sufferers at the HIV UPT RSUPN DR Cipto Mangunkusumo. Likewise, the results of research by Jusriana et al., (2020), which found that respondents who received family support were more compliant in carrying out ARV therapy and the results of the analysis chi square The  $p$  value obtained was 0.024 ( $p < 0.05$ ), this shows that there is a significant relationship between family support and compliance in carrying out the ARV therapy program at the Makassar City Peer Support Group Care Foundation

The ARV treatment program is one of the medical treatments that can improve the quality of life of patients with HIV. ARV treatment works by slowing down the replication of the HIV virus which will then stimulate CD4+ and the immune system (Ministry of Health of the Republic of Indonesia 2014). The use of ARV drugs requires HIV-infected patients to have a good level of compliance in undergoing their treatment program. Compliance with taking medication for HIV sufferers includes accuracy in taking medication, dosage and also how to take medication. Compliance with the ARV treatment program is influenced by family involvement. HIV-infected patients who receive good family support will also have a good level of compliance in implementing the ARV treatment program. The results of this study show that the majority of respondents had a level of compliance in carrying out the ARV treatment program, namely 34 (58.62%). These results are in line with the results of Agustina's (2021) research, which found that 92.3% of respondents adhered to the treatment program they provided.

### **Implication and Limination**

In conducting this research, the author experienced limitations, namely collecting the number of respondents, this happened because the respondents were outside the service area and the respondents were absent from treatment.

## **Conclusions**

The characteristics of the majority of respondents were 26-35 years old (early adulthood), namely 39 (67.70%), male 36 (62.10%), high school education 28 (48.30%) and most respondents did not work 32 (55.20 %). The distribution of levels of family support obtained: the emotional support of respondents was mostly poor, 33 (56.90%), the instrumental support of respondents received good support 31 (53.40%), the information support received good support 30 (51.70%), the appreciation support received good support good 31 (53.40%), and network support mostly received good support 34 (56.60%). Overall, most respondents have good family support, 30 (51.70%). The distribution of levels of compliance with the treatment program showed that the majority of respondents were compliant with the treatment program, namely 34 (58.62%). Analysis results chi square Between family support and the level of adherence to the ARV treatment program, it was found to be  $p = 0.000$  ( $p < 0.05$ ), with Odds Ratio 51,333. This shows that there is a significant relationship between family support and the level of compliance with the treatment program for HIV-AIDS patients at the Seroja Clinic, RSUD dr. Ajidarmo Lebak. Respondents who receive good family support will be more compliant with the ARV treatment program

## **Acknowledgments**

STIKes Abdi Nusantara Jakarta, RSUD dr. Ajidarmo Lebak, and all the respondents to this research.

## **Author Contribution**

Author 1 and Author 2 contributed to the preparation, data collection, processing and documentation of research results

## **Conflict of interest**

Expected The results of this research can be used as teaching material in providing nursing care to patients suffering from HIV-AIDS. It is hoped that hospitals can apply the results of this research to families of HIV-AIDS sufferers so that families can provide support to patients in carrying out ARV treatment programs.

## References

- [1] Abbott, J. (2023). Hubungan Umur, Jenis Kelamin, Dan Riwayat Infeksi Menular Seksual (Ims) Dengan Kejadian Hiv/Aids Di Wilayah Kerja Puskesmas Penurunan Kota Bengkulu Tahun 2022. *IJournal of Nursing and Public Health*, 11(1), 169–174. [https://doi.org/10.1007/978-3-319-18449-4\\_35](https://doi.org/10.1007/978-3-319-18449-4_35)
- [2] Adnan Dalfian, Kheru, A., & Marwan, D. (2021). Hubungan Dukungan Keluarga Dan Tingkat Pendidikan Pasien Terhadap Kepatuhan Minum Obat Antiretroviral Pasien HIV AIDS Di Poli RSUD Dr. Drajat Prawiranegara Serang Banten. *MAHESA: Malahayati Health Student Journal*, 1(2), 82–91. <https://doi.org/10.33024/mahesa.v1i2.3756>
- [3] Afriana, N., Luhukay, L., Mulyani, P. S., Irmawati, Romauli, Pratono, Dewi, S. D., Budiarty, T. I., Hasby, R., Trisari, R., Hermana, Anggiani, D. S., Asmi, A. L., Lamanepa, E., Elittasari, C., Muzdalifah, E., Praptoraharjo, I., Theresia Puspoarum, & Devika. (2022). Laporan Tahunan HIV AIDS 2022. Kementerian Kesehatan Republik Indonesia. [http://p2p.kemkes.go.id/wp-content/uploads/2023/06/FINAL\\_6072023\\_Layout\\_HIVAIDS-1.pdf](http://p2p.kemkes.go.id/wp-content/uploads/2023/06/FINAL_6072023_Layout_HIVAIDS-1.pdf)
- [4] Agustiani, S., Sunandar, K., & Fazriana, E. (2023). Hubungan Dukungan Keluarga dengan Kualitas Hidup Orang dengan HIV / AIDS di Komunitas Puzzle Indonesia.
- [5] Amelia, M., Hadisaputro, S., Laksono, B., & Anies, A. (2017). Faktor Risiko yang Berpengaruh terhadap Kejadian HIV/AIDS pada Laki-Laki Umur 25 - 44 Tahun di Kota Dili, Timor Leste. *Jurnal Epidemiologi Kesehatan Komunitas*, 1(1), 39–46. <https://ejournal2.undip.ac.id/index.php/jekk/article/view/3960>
- [6] Askhya, D. V. (2022). Jumlah Orang yang Hidup dengan HIV Secara Global Menurut Wilayah (2021). *Katadata Media Network Databoks*. <https://databoks.katadata.co.id/datapublish/2022/08/29/384-juta-orang-hidup-dengan-hiv-pada-2021>
- [7] Audhah, M. H., & Agustina, M. (2016). Hubungan Dukungan Emosional Keluarga dengan Keberhasilan Pelaksanaan Program Pengobatan HIV / AIDS di. *The Indonesian Journal of Infectious Disease*, 3(1), 38–44.
- [8] Budhi, E. (2018). *Asuhan Keperawatan pada Pasien dengan Gangguan Sistem Imunologi*. Pustaka Baru Press.
- [9] Chryest Debby, Sianturi, S., & Susilo, W. (2019). Faktor-Faktor Yang Berhubungan Dengan Kepatuhan Minum Obat Arv Pada Pasien Hiv Di Rscm Jakarta Factors Related to Compliance of ARV Medication in HIV Patients at RSCM Jakarta. *Jurnal Keperawatan*, 10(1), 15–25.
- [10] Djalaluddin, A. A. (2018). Hubungan Antara Dukungan Sosial dan Penerimaan Diri Pada Ibu Rumah Tangga yang Mengidap HIV/AIDS di Surakarta. 74. [https://dspace.uui.ac.id/bitstream/handle/123456789/11039/Amaliyah\\_Amany\\_Dj\\_-\\_Skripsi\\_CD.pdf?sequence=2&isAllowed=y](https://dspace.uui.ac.id/bitstream/handle/123456789/11039/Amaliyah_Amany_Dj_-_Skripsi_CD.pdf?sequence=2&isAllowed=y)
- [11] Habibulloh, A. (2022). Hubungan Dukungan Keluarga Dengan Kepatuhan Minum Obat Arv Selama Pandemi Covid-19 Pada Orang Dengan Hiv/Aids. [http://repository.stikesdrsoebandi.ac.id/id/eprint/342%0Ahttp://repository.stikesdrsoebandi.ac.id/342/1/18010115\\_Ahmad\\_Habibulloh.pdf](http://repository.stikesdrsoebandi.ac.id/id/eprint/342%0Ahttp://repository.stikesdrsoebandi.ac.id/342/1/18010115_Ahmad_Habibulloh.pdf)
- [12] Hidayati, A. N., Rosyid, A. N., Nugroho, C. W., Asmarawati, T. P., Ardhiansyah, A. O., Bakhtiar, A., Amin, M., & Nasronudin. (2019). *Manajemen HIV/AIDS Terkini, Komprehensif dan Multidisiplin*. Rumah Sakit Universitas Airlangga. [https://repository.unair.ac.id/95080/3/Manajemen\\_HIV\\_%26\\_AIDS.pdf](https://repository.unair.ac.id/95080/3/Manajemen_HIV_%26_AIDS.pdf)
- [13] Joyce, B., & Hawks, J. H. (2014). *Keperawatan Medikal Bedah Manajemen Klinis Untuk Hasil Yang Diharapkan* (edisi 8 bu). Salemba Medika.
- [14] Jusriana, Fatmah Afrianty Gobel, & Arman. (2020). Faktor yang Mempengaruhi Kepatuhan Terapi Antiretroviral pada Orang Dengan HIV di Yayasan Peduli Kelompok Dukungan Sebaya

- Kota Makassar. *Window of Public Health Journal*, 1(3), 241–249. <https://doi.org/10.33096/woph.v1i3.56>
- [15] KemenKes RI. (2023). Profil Kesehatan Indonesia 2021. Kementerian Kesehatan Republik Indonesia. <https://www.kemkes.go.id/id/profil-kesehatan-indonesia-2021>
- [16] KemenKes, R. (2022). Aporan Eksekutif Perkembangan Hiv Aids Dan Penyakit Infeksi Menular Seksual (Pims) Triwulan I Tahun 2022. [https://siha.kemkes.go.id/portal/files\\_upload/Laporan\\_TW\\_1\\_2022.pdf](https://siha.kemkes.go.id/portal/files_upload/Laporan_TW_1_2022.pdf)
- [17] KemenKes. (2014). PERATURAN MENTERI KESEHATAN Republik Indonesia Nomor 87 Tahun 2004 Tentang Pedoman Antiretroviral. In Kementerian Kesehatan Republik Indonesia.
- [18] KemenKes. (2017). Program Pengendalian HIV AIDS dan PIMS Fasilitas Kesehatan Tingkat Pertama. Kementerian Kesehatan Republik Indonesia. [https://siha.kemkes.go.id/portal/files\\_upload/BUKU\\_3\\_PENGENDALIAN\\_HIV\\_COLOR\\_A5\\_15x21\\_cm.pdf](https://siha.kemkes.go.id/portal/files_upload/BUKU_3_PENGENDALIAN_HIV_COLOR_A5_15x21_cm.pdf)
- [19] Khairunnisa, D. A. (2015). Efektivitas dukungan sosial bagi ODHA (Orang dengan HIV/AIDS) di Kelompok Dukungan Sebaya Kuldesak di Kota Depok). In Universitas Islam Negeri Syarif Hidayatullah Jakarta (Vol. 53, Issue 9).
- [20] Kurnia, A. (2018). Dukungan Sosial Pada Penderita HIV/AIDS Atau ODHA. Fakultas Psikologi Universitas Ahmad Dahlan, 2–6. [https://eprints.uad.ac.id/9538/1/Kurnia Attari - Dukungan Sosial Pada Penderita Hiv Aids Atau Odha.pdf](https://eprints.uad.ac.id/9538/1/Kurnia%20Attari%20-%20Dukungan%20Sosial%20Pada%20Penderita%20Hiv%20Aids%20Atau%20Odha.pdf)
- [21] Kurniawati, Y. (2022). Pengaruh Tingkat Pendidikan Dengan Kejadian HIV/AIDS. *Jurnal Bidan Pintar*, 3(2), 1–9. <https://ojs.unik-kediri.ac.id/index.php/jubitar/article/view/1674>
- [22] Nadirawati. (2018). Buku Ajar Asuhan Keperawatan Keluarga Teori dan Aplikasi Praktik (1st ed.). PT Refika Aditama.
- [23] Nasronudin. (2007). HIV & AIDS Pendekatan Biologi, Molekuler, Klinis dan Sosial (B. Jusuf, S. Eddy, Suharto, H. Usman, & A. W. Dwi (eds.)). Airlangga University Press.
- [24] Prasetyo, O. D., & Qur, N. (2022). Pengaruh Dukungan Keluarga dan Masyarakat terhadap Perilaku Pengobatan Pasien HIV / AIDS di Kabupaten Tulungagung. *Dunia Keperawatan: Jurnal Keperawatan Dan Kesehatan*, 10(2), 203–209. <https://doi.org/10.20527/dk.v10i299>
- [25] Prasetyo, O. D., & Qur, N. (2022). Pengaruh Dukungan Keluarga dan Masyarakat terhadap Perilaku Pengobatan Pasien HIV / AIDS di Kabupaten Tulungagung. *Dunia Keperawatan: Jurnal Keperawatan Dan Kesehatan*, 10(2), 203–209. <https://doi.org/10.20527/dk.v10i299>
- [26] Safitri, C., Rubianto, & Untari, E. K. (2019). Profil Karakteristik Pada Pasien Hiv/Aids Dengan Terapi Antiretroviral Di Klinik Cst Rsjd Sungai Bangkong Pontianak.
- [27] Sanad, S. A., Putri, P. M., Kusumawati, A., & Nitiprodjo, A. H. (2022). Hubungan Tingkat Pendidikan dan Usia Dengan Perilaku Pencegahan Transmisi HIV/AIDS Pada Ibu Rumah Tangga di Kelurahan Arcawinangun Kecamatan Purwokerto Timur Kabupaten Banyumas. *Jurnal Medika Udayana*, 11(7), 88–93.
- [28] Sianturi, S. R., & Aprianingsih, Y. (2021). Hubungan Karakteristik Individu Dengan Tingkat Pengetahuan Masyarakat Tentang Penyakit Hiv/Aids Di Bekasi. *Jurnal Keperawatan Dan Kesehatan Masyarakat Cendekia Utama*, 10(3), 210. <https://doi.org/10.31596/jcu.v10i3.422>
- [29] Supriyatni, N., Salim, L. A., Hargono, A., & Febriyanti. (2023). Antiretroviral medication adherence for people with HIV/AIDS. *Journal of Public Health in Africa*, 14(7). <https://doi.org/10.4081/jphia.2023.2434>
- [30] WHO. (2023). Data dan Statistik HIV. World Health Organization. [https://translate.google.com/website?sl=en&tl=id&hl=id&client=srp&u=https://cdn.who.int/media/docs/default-source/hq-hiv-hepatitis-and-stis-library/j0294-who-hiv-epi-factsheet-v7.pdf?sfvrsn%3D5cbb3393\\_7](https://translate.google.com/website?sl=en&tl=id&hl=id&client=srp&u=https://cdn.who.int/media/docs/default-source/hq-hiv-hepatitis-and-stis-library/j0294-who-hiv-epi-factsheet-v7.pdf?sfvrsn%3D5cbb3393_7)

- [31] Yuldensia, Avelina, & Idwan. (2018). Hubungan Antara Dukungan Keluarga Dengan Kualitas Hidup Pasien Hiv/Aids Yang Menjalani Terapi di Klinik Vct Sehati Rsud Dr. T.C. Hillers Maumere 1, 2 1,2. 93–103.