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The Relationship between Family and Health Worker Support and the Consumption of ARV by Housewives with HIV

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ABSTRACT

Background: Human immunodeficiency virus (HIV) is an infection that attacks the body`s immune system, specifically the white blood cells called CD4 cells. Housewives rank fourth in HIV/AIDS cases, according to data collected from all districts/cities in Banten Province. The aim of the study was to determine whether there was a relationship between family support and health worker support with Adherence of housewives with HIV and consumption ARVs in South Tangerang City. **Methods:** This study is quantitative design with analytic cross-sectional research. Sample size was as many as 103 respondents. Instrument study that is questionnaire. Data processing is carried out with analysis test Kendall-Taw at 95% level of confidence ($\alpha = 0.05$). **Results:** The study analysis with Kendall-Taw variable shows a relationship between family support with adherence of housewives with HIV in Consuming ARV (*p*- value 0.00 < alpha 0.05) and there is no relationship between health worker support with the adherence of housewives with HIV in Consuming ARV (*p*-value 0.18> alpha 0.05) in South Tangerang City. **Conclusion:** The role of nurses in health promotion is to prevent people living with HIV from getting into a worse condition. The environment must be positive towards health maintenance and improvement, increasing motivation and commitment with more obedience towards ARV.

Keywords: Family Support; Health Worker Support; Adherence

INTRODUCTION

The infection known as HIV targets the body's immune system, particularly the CD4 cells, which are white blood cells. A person's resistance to opportunistic infections like tuberculosis and fungal infections, severe bacterial infections, and several malignancies is weakened as a result of HIV's destruction of these CD4 cells. WHO advises getting tested for HIV for everyone who may be at risk. Self-tests and straightforward, cost-effective quick diagnostic procedures can both be used to identify HIV infection. The 5Cs - consent, confidentiality, counseling, accurate results, and connection to treatment and other services - must be adhered to by HIV testing services (WHO, 2020). The virus known as HIV (human immunodeficiency virus) targets the immune system of the body. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). There is currently no effective cure. Once people get HIV, they have it for life. But with proper medical care, HIV can be controlled. People with HIV who get effective HIV treatment can live long, healthy lives and protect their partners (Controlling and Preventing Disease General Directorate, 2021).

HIV/AIDS continues to be a major global public health issue considering the incidence is very high and has a high level of morbidity and mortality worldwide. Data from the United Nations Program on HIV and AIDS (UNAIDS) shows that adults and children living with HIV worldwide are 37.7 million in 2020, of which 1.5 million are newly infected.

The deaths caused by AIDS amounted to 680,000. In the Asia and the Pacific, adults and children living with HIV

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amounted to 5.8 million, with new infections in Asia and the pacific amounting to 240,000. This causes Asia and the pacific to rank as the second largest continent after Eastern and southern Africa. HIV/AIDS in Indonesia ranks 4th largest in Asia and the Pacific, amounting to 359,457 cases from 22 countries reported (UNAIDS, 2021).

HIV/AIDS cases in Indonesia, namely 30,935 cases in 2015, peaked in 2019 at 50,282 cases, or an increase of 62.5%. Based on age, the majority of HIV/AIDS cases were of productive age, namely 69.3% in 2016 increasing to 70.4% in 2019 HIV/AIDS cases in the productive age of 25-49 years. In this productive age, a person is still sexually active as a medium for transmitting HIV, so the potential for an increase in HIV cases is a threat in Indonesia (Controlling and Preventing Disease General Directorate, 2019).

Banten Province, as one of the major provinces in Indonesia, had a number of HIV/AIDS cases as of March 2020 of 13,451 cases, which makes Banten the 9th province with the largest HIV/AIDS cases out of the 33 provinces in Indonesia (Controlling and Preventing Disease General Directorate, 2021). In South Tangerang City, as one of the most recently established cities in Banten Province, which is only 3 years old, it already ranks as the 2nd largest case in Banten Province out of 8 districts or cities, namely 196 HIV cases and 37 AIDS cases, adding to the number of new cases in 2019 where there was an increase of 4.8% HIV and 48% AIDS compared to the previous year. The accumulation of HIV/AIDS cases until October 2021 in South Tangerang City was 1,671 cases (1,414 HIV cases and 257 AIDS cases). If viewed based on the age of HIV/AIDS cases in South Tangerang City, more than half of them are in the productive age, namely 25-49 years old in 2021. In this productive age, a person has a great potential for mobilization and is sexually active as a way of transmitting HIV/AIDS. AIDS. Based on the type of work, housewives rank 4th in HIV/IADS cases, namely 122 HIV and 35 AIDS cases in South Tangerang City (Badan Pusat Statistik Kota Tangerang Selatan, 2021).

The 2030 target plan proclaimed by Indonesia adopted the UNAIDS target, namely: (1) no more HIV transmission, namely 90% of patient with HIV/AIDS know their status; (2) no more AIDS deaths, namely 90% of people with HIV/AIDS are treated or undergoing ARV treatment; (3) there is no more stigma and discrimination against people with HIV/AIDS, namely 90% of people with HIV/AIDS do not feel discriminated against (Sugihantono, 2019). In achieving the second target, namely no more deaths from AIDS, then PLWHA must comply with taking Anti Retro Viral (ARV). Adherence therapy is a condition where the patient adheres to his treatment on the basis of his own awareness.

The use of Anti Retro Viral (ARV) drugs requires a high level of adherence to obtain therapeutic success and prevent resistance, which is 90-95% adherence to achieve viral suppression of 85% (Andriani, Rika, & Sandhita, 2014). In the national guidelines for antiretroviral therapy (ARV) issued by the Ministry of Health of the Republic of Indonesia, it is stated that the expectation of adherence to taking medication for HIV/AIDS sufferers is 100% or Highly Active Antiretroviral Therapy (HAART), meaning that HIV/AIDS sufferers are expected to consume antiretroviral drugs (ARVs) in accordance with the dosage given by a doctor and nothing is missed at the appointed time (Ubra, 2012).

In Indonesia, it is known that the level of adherence to antiretroviral (ARV) treatment is very low, namely 40-70%, which is still below the national target of 95%. Received ARV therapy, and only 39% routinely received ARV treatment of those found and still alive. The number of People Living With HIV/AIDS (PLWHA) on ARV has only reached 25% of the target of 81% in 2020 (Centers for Disease Control and Prevention, 2021).

Banten Province is a province that is included in the top 10 HIV cases where there is a very large gap between those infected with HIV and those taking ARVs, namely 33% of PLWHA who are not taking ARVs (Controlling and Preventing Disease General Directorate, 2021). Housewives as a type of work that ranks 4th in HIV/AIDS cases, it was recorded that from all regencies and cities in Banten Province in 2021 (January-November) there were 962 housewives with HIV, of which 917 people were taking ARVs, but only 64 people obedience or only 7%. Meanwhile, in South Tangerang City, there are 122 housewives with HIV, of which 118 are taking ARVs and only 2 are compliant, meaning that only 1.7% of housewives are in compliance with taking ARVs (South Tangerang City Health Office, 2021).

The objective from this study that to determine relationships between Family support and Health worker support

with the adherence to take ARVs among housewifes with HIV in South Tangerang City.

METHODOLOGY

The design of the research in this study uses a cross-sectional approach. The sample in this study was all housewives with HIV/AIDS in Tangerang City at the time of the study,which include 103 respondents who met the criteria for inclusion and exclusion in the study. Data collection is using questionnaires to obtain primary data, namely data related to socio-demographic respondent data (respondent's age, level of last education, long as PLWHA, long consumption of ARV, and types of ARV), adherence with ARV consumption, Family support, and Health worker support. Data analysis with Bivariate analysis is a cross-table between independent variables and dependent variables by Kendall Tau test.

RESULTS

Univariate Analysis

Table 1: Distribution of Respondent by Age (n = 103)

Age	n	%
20 – 40 years	68	66
41 – 60 years 61 – 80 years	34 1	33 1
Total	103	100

Distribution of respondents by age, more than half of the respondents are 66% aged 20-40 years and there is one respondent aged over 60 years (1%).

Table 2: Distribution of Respondent by Level Education (n = 103)

Level Education	n	%
Basic	27	26.2
Middle High	69 7	67 6.8
Total	103	100

Based on the level of education, more than half of the respondents had a secondary education level, namely 69 respondents (69%).

Table 3: The Long of as PLWH (n = 103)

Long as PLWH	n	%
< 1 year	11	10.7
> 1 – 3 years > 3 – 5 years > 5 years	19 18 55	18.4 17.5 53.4
Total	103	100

More than half of the respondents in terms of length of time as PLWH are > 5 years by 53.4% or 55 respondents.

Table 4: Distribution of Long of Consume ARV (n = 103)

Long as consume ARV	n	%
< 1 year	12	11.7
> 1 – 3 years > 3 – 5 years > 5 years	17 20 54	16.5 19.4 52.4
Total	103	100

The duration of taking ARV is longer than half of the respondents (52.4%), or as many as 54 respondents have > 5 years.

Table 5: Distribution of Kind of ARV

Kind of ARV	n	%
Duviral + Nerviral	13	12.6
Duviral + Evafirens	8	7.8
Tenovofir+Hiviral+Neviral	6	5.8
Tenovofir+Hiviral+Evafirens	16	15.5
Tenofovir+Lamivudine+Dolutegravir	34	33.0
Others	26	25.2
Total	103	100

The type of ARV used by almost half of the respondents was taking Tenofovir and Lamivudine along with Dolutegravir.

Table 6: Distribution of Family support (n = 103)

Family Support	n	%
High support	56	54.4
Medium support	45	43.7
Lower support	2	1.9
Total	103	100

Regarding family support, some respondents experienced low family support, namely 2 respondents (1.9%).

Table 7: Distribution of Health Worker Support (n = 103)

Health Worker Support	n	%
High support	58	58.3
Medium support	44	42.7
Lower support	1	1
Total	103	100

Regarding the health worker support, it was found that more than half of the respondents had high health worker support, namely as many as 58 respondents, or 58.3%.

Table 8: Distribution of Adherence of ARV (n= 103)

Adherence	n	%
Compliance	80	77.7
Non-Compliance	23	22.3
Total	103	100

Distribution of respondents by adherence more than half of the respondents are 77.7% are compliance and small portion of respondents are not compliance namely 23 (22.3%).

Bivariate Analysis

Table 9: The Relationship between Family Support and Adherene of ARV

Family support	Adherence obedience		Not obedience	
	f	%	F	%
High support	50	48.5	6	5.8
Medium support	29	28.2	16	15.5
Low support	1	1	1	1
Total	80	77.7	23	22.3

It is well established that there is a correlation between limited family support and non-compliance, which accounts for one respondent's (1%). According to the statistical test results, which showed a significant value of *p*-value 0.00 < 0.05, there is a connection between family support and housewives in South Tangerang City who are HIV positive taking their ARVs.

Figure 10: The Relationship between Health Worker Support and Adherene of ARV

Health worker support	Adherence obedient		Not obedient	
	f	%	F	%
High support Medium support	48 31	46.6 30.1	10 13	9.7 12.6
Low support	1	1	0	0
Total	80	77.7	23	22.3

The relationship between health workers supports and adherence where the support of health workers is high but noncompliance are 10 respondents (9.7%). It is inferred from the statistical test findings that a significant *p*-value of 0.18 >0.05 was obtained, indicating that there is no relationship between health workers' support and the adherence of housewives with HIV to consuming ARV in South Tangerang City.

DISCUSSION

Discussion of Univariate Analysis Result

Distribution of respondents by age, showed that more than half of the respondents are aged 20-40 years (66%) and there is one respondent aged over 60 years (1%). The results of the above study, when viewed by age, are in line with the theory according to Setiarto *et al.*, (2021) that one of the characteristics of people that is quite important because quite a lot of diseases are found with various frequency variations caused by age. Supported by research conducted by Suprihatin (2019), entitled Factors Affecting Adherence to ARV Therapy in PLWHA at the Tropical Infection Clinic, dr. Saiful Anwar Malang stated that more than half of the 236 respondents, namely 166 respondents (70.3%), were in the adult category (26-45 years).

Based on the level of education, more than half of the respondents had a secondary education level, namely 69 respondents (69%). Based on the level of education Ramadhania, Sarumpaet, and Lubis (2018) show that the higher a person's education, the easier it is to receive information, so that the more knowledge they have. According to Ramadhania, Sarumpaet, and Lubis (2018), habits are daily actions that are carried out repeatedly in the same way so that they become habits and are obeyed by the community.

More than half of the respondents, in terms of length of time as PLWH, are >5 years by 53.4% or 55 respondents. The duration of taking ARV is more than half of the respondents (52.4%) or as many as 54 respondents have >5 years. The results of Wulandari's research (2022) from the results of cross tabulation between the length of time as PLWH and the arrival of taking ARV <1 year + 5 years > 5 years, most of them did not regularly come to take ARV and did not change ARV drugs. In terms of length of time as PLWH and duration of taking ARVs, this is in line with Pratiwi, Wanufika, and Sukamara's, (2019) research, which shows that most of them have suffered from HIV for 1-5 years, namel, 24 people with HIV (72.7%), and most of them have received ARVs for >2 years, namely 17 patients (51.5%). This shows that someone who has been infected by a health worker is immediately recruited to take ARVs regularly.

Bivariate Analysis

It is well established that there is a correlation between limited family support and non-compliance in 1 respondent's (1.9%) case. According to the statistical test results, which showed a significant *p*-value of 0.00 <0.05, there is a connection between family support and adherence among housewives in South Tangerang City who are taking ARV.

According to Friedman's *et al.*, (2015) idea, there is a connection between family support and adherence, specifically

attitudes and behaviors of family acceptance of family members in the form of informational support, evaluation support, instrumental assistance, and emotional support. In order to make family members feel taken care of, family support is a type of interpersonal interaction that comprises the attitudes, actions, and acceptance of family members.

This is supported by research by Anasari, and Trisnawati (2018) with the results of the study that pregnant women with HIV who took ARV and received family support were 24 people (68.6%) more than those who did not get good family support, namely, 11 people (31.4%) which states that family support is indispensable in the healing process of sick family members, good family, support will improve the health status of members.

The relationship between wellbeing laborers back and adherence where the back of wellbeing laborers is tall, but noncompliance are 10 respondents (9.7%). Measurable test comes about gotten a critical esteem of *p*-value 0.18 >a 0.05, it is concluded that there's no relationship between wellbeing specialists bolster with adherence of housewives with HIV in expending ARV in South Tangerang City.

Based on the outcomes, Fitriah, & Fitri, (2020) showed that respondents received support from medical caregivers, were 71 individuals (89.8%) and 8 individuals did not respond (10.1%). Medical caretakers are individuals who were regularly associated with patients, who have a commitment to assist patients, were responsible for giving social bolster. The role of medical caretakers is to take care of the wellbeing and advancement of the patients, to avoid individuals living with HIV from entering a more regrettable condition by welcoming them and considering them as a part of the society. They must also act emphatically towards wellbeing support and change their lifestyle, expanding inspiration and commitment to be more obedient.

CONCLUSION

The results of the statistical test showed a significant *p*-value of 0.0 < alpha 0.05, so that there was a significant relationship between family support and adherence and among housewives with HIV. The correlation between health worker support and adherence that the statistical test results showed a significant *p*-value of 0.018 > a 0.05 so that it was concluded that there was no relationship between the relationship between health workers support and adherence of housewives with HIV in consuming ARVs in South Tangerang City.

Conflict of Interest

The authors declare that they have no conflict of interests.

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