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Correlation between Family Support with Sexual Behavior and Antiretroviral Adherence on HIV/AIDS Patients in "A" Community Bandung

Hubungan Dukungan Keluarga dengan Perilaku Seksual dan Kepatuhan Minum Antiretroviral pada Pasien HIV/AIDS di Komunitas "A" Kota Bandung

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Abstract

Family support is the attitude, action, and acceptance of the family towards its members. One of the functions of the family is to support the health care of other family members. HIV (Human Immunodeficiency Virus) is a retrovirus that attacks the immune system of CD4+ cells, and if not treated immediately, the patient will fall into an AIDS (Acquired Immunodeficiency Syndrome) condition. HIV/AIDS patients need support from both social and family. The incidence of HIV/AIDS in West Java during 2019 was ranked third in Indonesia, which was 6,066 patients. The aim of this study was to determine the relationship between family support with patient's sexual behavior and adherence to taking antiretroviral drugs. The research method used is an analytical method with a cross-sectional design. The sample of this study was HIV patients who are members of Community "A" Bandung, with a total of 51 respondents. Statistical analysis showed that there was a correlation between family support and sexual behavior of HIV/AIDS patients (p=0.013), however, there was no correlation between family support and antiretroviral adherence (p= 0.12). In conclusion, family support is related to sexual behavior, but not related to adherence to taking antiretrovirals in HIV/AIDS patients.

Keywords: adherence; family support; HIV; sexual behavior

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Abstrak

Dukungan keluarga merupakan sikap, tindakan, dan penerimaan keluarga terhadap anggotanya. Salah satu fungsi keluarga adalah untuk mendukung perawatan pemeliharaan kesehatan anggota keluarga lainnya. HIV (*Human Immunodeficiency Virus)* adalah retrovirus yang menyerang sel sistem imun CD4+ yang jika tidak segera ditangani, pasien akan jatuh ke kondisi AIDS (*Acquired Immunodeficiency Syndrome).* Pasien HIV/AIDS membutuhkan dukungan baik dari sosial maupun keluarganya. Angka kejadian HIV/AIDS di Jawa Barat selama tahun 2019 berada di urutan ketiga di Indonesia yaitu sebanyak 6.066 pasien. Penelitian ini bertujuan untuk mengetahui apakah ada hubungan antara dukungan keluarga dengan perilaku seksual dan kepatuhan pasien dalam minum obat antiretroviral. Metode penelitian ini adalah analitik dengan desain potong lintang. Sampel penelitian adalah pasien HIV yang tergabung di Komunitas "A" Kota Bandung berjumlah 51 responden. Hasil analisis statistik menunjukkan bahwa dukungan keluarga berhubungan dengan perilaku seksual pasien HIV/AIDS (p=0,013), namun tidak berhubungan dengan kepatuhan minum antiretroviral (p=0,12). Simpulan, dukungan keluarga berhubungan dengan perilaku seksual, namun tidak berhubungan dengan kepatuhan minum antiretroviral pada pasien HIV/AIDS.

Kata kunci: dukungan keluarga; HIV; kepatuhan; perilaku seksual

Introduction

HIV (Human Immunodeficiency Virus) is an RNA retrovirus that specifically attacks the human immune system. The decrease in the immune system caused by this virus will make it easier for infected patients to get other opportunistic infections, causing AIDS (Acquired Immunodeficiency Syndrome) which can occur after 2 to 15 years if not treated, depending on the individual patient.[1,2]

HIV (Human Immunodeficiency Virus) or AIDS (Acquired Immunodeficiency Syndrome) is a global health problem, including in Indonesia. Since it was first discovered until June 2018, 433 (84.2%) cases of HIV/AIDS were reported from 514 cities in 34 provinces in Indonesia.[3] As of June 2018, the number of patients experiencing HIV infection had been reported as many as 301,959 people (47% of the estimated number of people living with HIV AIDS in 2018 were 640,443 people) and most were found in the age group 25-49 years and 20-24 years. West Java is one of the provinces in Indonesia which has the highest number of HIV/AIDS patients.[3] Based on gender, the highest percentage of HIV patients in Indonesia in 2019 was male (64.5%) and the highest number of patients with AIDS were experienced men (68.6%). Based on age group, the highest number of HIV infections ranged between 25-49 years.[4]

The Joint United Nations Program on HIV/AIDS (UNAIDS) has an achievement target for 2020 called 90-90-90, namely 90% of people experiencing HIV must know their status, 90% who know their status get antiretroviral drugs, and 90% of people who received treatment experienced a decrease in viral load. In Indonesia, 51% of people who are HIV positive know

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their status and only 17% receive treatment.[5] Sexual behavior is driven by sexual desires that can be carried out alone or with other people (of the opposite sex or same sex). These behaviors range from feelings of attraction to dating, kissing, and sexual intercourse.[6] Several health-related behaviors of HIV/AIDS patients, including sexual behavior, really need social support from the sufferer's environment.[7]

Efforts to support and retain patients to adhere to long-term antiretroviral drugs are important in this modern era. Globally, the availability of antiretroviral drugs is associated with reduced morbidity and mortality rates for HIV/AIDS patients, resulting in a better quality of life for these patients.[8] Antiretroviral drugs have a very important role in improving the quality of life of HIV/AIDS patients, it is hoped that HIV positive patients will be able to maintain their adherence to taking antiretroviral drugs. A drastic increase in viral load (the amount of HIV virus in the blood) occurred in patients who do not take their medication regularly. Patient irregularity in taking medication can also lead to failure or resistance to antiretroviral drugs.[9,10]

Studies by Vaillant et al, 2022 and Brew & Garber, 2020 found a correlation between family support and adherence to taking antiretrovirals, so family support will improve health behavior including adaptation and ways to deal with pain and utilization of health facilities. A supportive family environment also reduces the fear of HIV/AIDS patients against feelings of isolation and rejection from other family members.[11,12] There are several studies found no significant correlation between family support and adherence to taking antiretrovirals, and there is a fear of bad discrimination and stigma in these patients. Low support from the patient's family causes patients to hesitate to discuss their illness including HIV diagnosis, and initiation of antiretrovirals, and some even tend to shut down and not tell their families that they have HIV infection.[13]

Studies on the relationship between family support and sexual behavior found that family support influences sexual behavior. Respondents who received support from their caregivers felt more comfortable sharing their problems, including risky sexual behavior.[14,15] Research on the effect of family support on sexual behavior and adherence of HIV patients in Indonesia in taking antiretroviral drugs has not been done much. The purpose of this study was to determine the effect of family support on sexual behavior and adherence to taking antiretrovirals in HIV/AIDS patients.

Method

The research is an observational analytic study with a cross-sectional design, in which data is obtained from a survey based on the Nurihwani questionnaire, the WHO questionnaire

validated by Jesica Rachel, and personal data. [15] The data obtained were analyzed using the chi-square statistical test.   The research subjects were all HIV-positive patients who are members of Community "A" totaling 51 respondents. Questionnaires were submitted in the form of a google form to Community leader's "A" to be distributed to the community members.

Family support referred in this study is defined as support from the nuclear family (father, mother, siblings, and husband/wife) of HIV patients in Community "A". This support was assessed by a questionnaire from Nurihwani, consisting of 10 assessment points. Of the 10 questions, questions no. 1-3 regarding emotional support and assessment, questions no. 4-7 regarding instrumental support, and questions no. 8-10 regarding informational support. The results are said supported if the total score is ≥ 25 and not supported if the total score is < 25.[16]

Compliance with taking medication is assessed on the regularity of taking the antiretroviral drugs. If the patient always takes medication regularly every day at the right dose for a predetermined period, namely the last 3 months, hence it is noted as compliance. If the patient does not take the medication even once, then the patient is declared non-adherent in taking antiretroviral drugs.[16]

Deviant sexual behavior includes sexual behavior or fantasies that are directed at achieving orgasm through relationships outside of heterosexual sex, namely with the same sex or immature partners and contrary to generally accepted norms of sexual behavior. Normal behavior is the opposite of deviant sexual behavior, according to the National Institute of Health. [18] It is said that sexual behavior is "good" if the total score of the respondent's behavior is less than 15, sexual behavior is "adequate" if the total score of the respondent's behavior is 15 - 18.75, and the behavior of sexuality is "less" if the total score of the respondent's behavior is more than 18.75.[18]

The population in this study were all HIV positive patients who were members of Community "A" totaling 100 people. Since there were limitations in data collection, the sampling was carried out using a consecutive sampling method, resulting in 51 people met the inclusion criteria. The inclusion criteria for this study were HIV positive patients aged 18-60 years, active in the community "A" Bandung City, and willing to complete this research questionnaire. The exclusion criteria in this study were patients who were not receiving antiretroviral drugs. The research was conducted from January 2020 until December 2020. This research was approved by the Research Ethics Committee of the Faculty of Medicine, Maranatha Christian University, Bandung – Immanuel Hospital No. SK 122/KEP/IX/2020.

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Results

The characteristics of the study subjects included age, gender, occupation, marital status, last education, the year when they were first diagnosed with HIV, Body Mass Index (BMI), sexual orientation, and injecting drug use can be seen in Table 1. Based on Table 1, most respondents are based on age between 21-30 years (59%), with male sex (98%), private employee jobs (31.4%), most of the respondents are married (90.1%), high school graduates (61%), were diagnosed with HIV in 2017 (29.4%), had an underweight Body Mass Index (46%), had a gay/lesbian sexual orientation (92.1%) and most of the respondents (49 people) were not injecting drug users (96%).

Table 1 Characteristics of Respondents

Variable	Category	Total	Percentage (%)
Age	≤20	3	6
	21-30	30	59
	31-40	17	33
	41-50	1	2
Sex	Male	50	98
	Female	1	2
Job	Employee	16	31.4
	Government employees	1	2
	Self-employed	15	29.4
	Businessman	7	13.7
	Labor	3	5.9
	College student	4	7.8
	Student	1	2
	Unemployed	4	7.8
Marital status	Married	5	9.9
	Not married	46	90.1
Last education	Elementary school	1	2
	Junior high school	4	8
	Senior High School	31	61
	College/university	15	29
Year of HIV diagnosis	2013	3	5.9
	2015	3	5.9
	2016	9	17.6
	2017	15	29.4
	2018	7	13.7
	2019	8	15.7
	2020	6	11.8
BMI	Underweight	46	90.1
	Normal	5	9.9
Sexual Orientation	Gay / lesbian	47	92.1
	Not gay/lesbian	4	7.9
Injecting drug use	Yes	2	4
	No	49	96

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The relationship between family support and sexual behavior was tested using the chi-square statistical test (Table 2). It is known that 33 (64.7%) respondents received support from their families, and 13 people of them have good sexual behavior. The statistical test results showed a significant relationship between family support and sexual behavior with a p-value of 0.013 (p<0.05). The results of this study are in accordance with the results of previous studies.[16]

This study also shows that the greater the support from the respondent's family, the better his sexual behavior will be. This is because good family support provides a sense of comfort and trust for HIV/AIDS patients so that they are free to tell most of the things they experience, including sexual behavior. [17,18] The relationship between family support and adherence totaking antiretrovirals can be seen in Table 3.

Based on table 3, it was found that 33 (64.7%) respondents received support from their families. Of the 33 respondents, all adhered to antiretroviral treatment, while the remaining 18 (35.3%) respondents did not receive support from their families. From the statistical test results, it was found that there was no relationship between family support and adherence to taking antiretrovirals (p-value=0.120). This result is in line with research from Nurihwani, 2017, which states that there is no relationship between family support and adherence to antiretroviral treatment in HIV/AIDS patients at the New Jumpandang Health Center.[16]

Table 2 Relationship between Family Support and Sexual Behavior

Family support	Sexual Behavior			Total (%)	*p*
	Less	Enough	Good		
Support	3	17	13	33 (64.7)	0.013
No support	8	5	5	18 (35.3)	
Total (%)	11 (21.5)	22 (43.1)	18 (35.4)	51 (100)	

Table 3 Relationship between Family Support and Adherence to Taking Antiretrovirals

Family support	Adherence to Antiretroviral Taking		Total (%)	*p*
	Obey	Not obey		
Support	33	0	33 (64.7)	0.120
No support	16	2	18 (35.3)	
Total	49	2	51 (100)	

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Discussion

The analysis between family support and sexual behavior showed that family support is related to the sexual behavior of HIV/AIDS patients in Community "A" Bandung City. The chi square test analysis showed a significant value (p = 0.013). The functions of the family is the affective function, for instance stabilizing the personality and meeting the psychological needs of family members. If family support is adequate, then these patients will feel comfortable and trust their families so that they are more free to tell most of the things they experience, including sexual behavior.[17]

Study done by Pasaribu & Sodik, 2018 showed similar results, namely that there was a relationship between family support and sexual behavior.[18] In adolescents it was found that greater family support including warmth, involvement, and good relations between parents and children reduced the rate of risky sexual behavior. This is very important because bad sexual behavior can increase the risk of HIV greater.[19,20]

The results of the chi square analysis on the relationship between family support and adherence to taking antiretrovirals showed no significant results (p=0.120), means family support was not related to adherence in taking antiretrovirals. This is in line with research from Nurihwani, 2017, namely that there is no relationship between family support and adherence to antiretroviral treatment in ODHA at the New Jumpandang Health Center.[16] Family support is not related to adherence in taking antiretrovirals probably because most of the respondents in our study are not married, they have very few family member around to remind them to take their antiretroviral drugs regularly.

Conclusion

Family support is related to sexual behavior in HIV/AIDS patients, but not related to adherence to taking antiretrovirals in HIV/AIDS patients at the Community "A" Bandung.

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