

## Factors Related to Adolescent Knowledge About HIV-AIDS Prevention in Students Madrasah Aliyah Negeri Pematangsiantar

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### ABSTRACT

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Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have become serious health problems in the 20th century. HIV-AIDS in adolescents needs attention. The highest proportion of AIDS was in the age group of 20-29 years (47.2 %), the at-risk group of adolescents, aged 15-18 years, is a group that is vulnerable to STIs (Sexually Transmitted Infections) with the largest number of people living with HIV-AIDS. National statistical data on HIV-AIDS sufferers in Indonesia, aged 15-24 years contribute 40% of all new HIV infections, every day more than 2500 teenagers are infected and more than 5.7 million teenagers are living with HIV-AIDS. There were 476 people living with HIV who were registered. This type of research is a cross-sectional survey research design. And the results of this study stated that there was a significant relationship between information sources, living environment, and age with adolescent knowledge about HIV-AIDS prevention with a chi-square p value = 0.000. The most widely used information source was electronic media of 53, 8 %. Residential environment, 64.8 % of respondents live with their parents. The majority of respondents are aged 13-15 years, namely 56% and those who have a good level of knowledge are 23.1 %. Based on the regression analysis, it was stated that information sources contributed to knowledge by 10.6 %, living environment contributed to knowledge by 11.9%, age contributed to knowledge by 27.9%. And the most dominant contribution to knowledge is age, which is equal to 27.9 %.

#### Keywords:

Knowledge, Adolescents, HIV-AIDS

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### 1. INTRODUCTION

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) have become serious health problems in the 20th century. The United Nations Program on HIV-AIDS (UNAIDS), 2004 states that currently in the world there has been an increase in the number of people with HIV-AIDS from 36.6 million people to 39.2 million people in 2004, while in Asia it is estimated that there are as many as 8.2 million people. million people with HIV-AIDS. [12]

In 2009, the global distribution of people living with HIV/AIDS (PLHA) in Western Europe and Central Europe was 820,000 people, Eastern Europe was 1.4 million people and North America was 1.5 million people, Central America and South America were 1.4 million people, Caribbean Islands (Caribbean) 240,000 people, Oceania 57,000 people, Middle East and North Africa 460,000 people, Sub-Saharan Africa 22.6 million people, East Asia (East Asia) 710,000 people, Central Asia 1.4 million people, South Asia and Southeast Asia (South&South-EastAsia) as many as 4.1 million people [4].

National statistical data on HIV-AIDS sufferers in Indonesia show that aged 15-24 years contributed an estimated 40% of all new HIV infections among adults worldwide in 2008, every day more than 2500 teenagers are infected and there are more than 5 in all. 7 million youth living with HIV-AIDS. [11]

Based on the 2013 Ministry of Health AIDS Surveillance report from the Directorate General of Disease Control and Environmental Health (PP&PL), the number of AIDS sufferers who died was around 3,708 people (20.1 %).

Campaign Coordinator of the Indonesian AIDS Foundation (2013), stated that adolescents are the population most at risk of contracting HIV-AIDS, because adolescents are an easy target for becoming consumers of narcotics and the sex industry.

DKI Jakarta has the highest HIV cases for urban areas, with East Jakarta as the area that has the most total cases by the end of 20% at 28% followed by West Jakarta 23Y9, Jakarta / Central 20%, South Jakarta 15%, and North Jakarta 14% . [10]

Based on data obtained from the Pematangsiantar City Health Office (2017), the number of PLWHA continues to grow every year. From January 2012 to May 2017, there were 476 people living with HIV who were registered, there were 12 people at toddler age (< 5 years), in childhood and early adolescence (5-16 years) there were 3 people, in there are 32 people in late adolescence (17-25 years), and in productive age, namely early adulthood to late adulthood (26-45 years) there are as many as 400 people, while in the elderly to seniors (> 46 years) there are 29 souls.

If the problems faced by these adolescents are not addressed immediately, it will have an impact on the increasing number of HIV-AIDS and the loss of the productive period of sufferers, so that in the end it will have an impact on the loss of productive age in Indonesia. Efforts made by the government through the Ministry of Health of the Republic of Indonesia and other institutions in reducing HIV-AIDS sufferers are carried out through education and promotion, namely counseling through campaigns, mass media , distribution of leaflets and campaigns for using condoms. But these efforts are still lacking or have not reduced the number of HIV-AIDS. Another thing that is done by NGOs (Non-Governmental Organizations) is to empower individuals with HIV-AIDS to be independent and ready to face the next life. Education/counseling on the behavior of contracting HIV-AIDS has been carried out but has not had an impact because the high incidence of contracting HIV-AIDS is still felt. [7].

Based on the description above, the researcher is interested in further examining "factors related to adolescent knowledge about HIV-AIDS prevention in Pematangsiantar State Madrasah Aliyah students." B. Formulation of the Problem Based on the description of the background above, the researcher formulated the problem as " " factors related to adolescents' knowledge of HIV-AIDS prevention in Pematangsiantar State Madrasah Aliyah students."

## **2. METHOD**

### **Research design**

This type of research is a sectional survey research design. According to [1], a cross-sectional survey is a study to study the dynamics of the correlation between risk factors and effects, by way of approach , observation or data collection at one time (point time approach).

### **Location and Time of Research**

The location of this research was carried out at the Pematangsiantar State Madrasah Aliyah. The time of the research was carried out from June to August 2022.

## **3. RESULTS AND DISCUSSION**

### **Univariate analysis**

Description of Information Sources In this study, it was found that most respondents obtained information from electronic media, namely as many as 49 respondents (53.8%) and 42 other respondents (46.2%) obtained information through print media. Description of the respondent's living environment In this study, it was found that 59 respondents (64.8%) lived with their parents, and 32 respondents (32.5%) did not live with their parents/boarding house. This is in accordance with our culture in society, where adolescent children should live together and be under the supervision of their parents.

### **Age Description**

In this study, the results were obtained that the most respondents aged 13-15 years were 51 respondents (56%) and aged 16-19 years were 40 respondents (44%). In general, students in senior high schools are in the middle adolescent age range and late adolescence (transition period). This is in accordance with the theory of Widiastuti (2009) which says that middle adolescence is in the age range of 13-15 years, and late adolescence is in the age range of 16-19 years.

### **Description of Respondent's Knowledge**

In this study, it was found that 21 respondents (23.1%) had good knowledge, 28 respondents (30.8%) had sufficient knowledge, and 42 respondents (46.2%) had less knowledge. It can be concluded that the majority of respondents have less knowledge, namely 46.2 % about HIV-AIDS prevention. Knowledge possessed by students will influence student behavior in HIV-AIDS prevention efforts. This is in accordance with Notoadmojo's theory

## **Bivariate Analysis**

Relationship between sources of information and level of knowledge/adolescents about HIV-AIDS prevention in Pematangsiantar State Madrasah Aliyah students. In this study, it was found that there was a significant relationship between sources of information and knowledge about HIV/AIDS prevention with  $p$  value = 0.000. This is in accordance with [8] Advances in technology also support easy access to obtain information, the more information received, the higher the insight and knowledge. The researcher's analysis of the respondents, almost all respondents have a smart phone complete with applications and advanced features to access information via the internet. This is supported by the wifi service provided by the school. Adequate facilities will motivate individuals to improve their daily performance. This makes it easier for students to get information about HIV/AIDS prevention efforts. The mass media, both print and electronic, as a means of communication has the task of conveying information and has a major influence in forming one's opinions and beliefs [8].

### **The relationship between the living environment and the level of knowledge of adolescents about HIV-AIDS prevention in Pematangsiantar State Islamic Senior High School students.**

In this study, the results showed that there was a significant relationship between the environment where they lived and the level of knowledge of adolescents about HIV/AIDS with a  $p$  value = 0.000. This is in accordance with the theory put forward by [7], namely that the status of residence is the physical environment that influences child development, parents are responsible for guiding, directing, and forging the child's personality. The social environment of the family has an influence on one's knowledge. Father, mother and family members are the social environment that is directly related to the individual. While society is the social environment that is known and influences the child's personality. The first child | getting information about sex from parents tends to have good knowledge and behavior [2].

### **The relationship between the age of the respondent and the level of knowledge of adolescents about HIV-AIDS prevention in Pematangsiantar State Islamic Senior High School students.**

In this study, the results showed that there was a significant relationship between the age of the respondents and the level of knowledge of adolescents about HIV/AIDS prevention with a  $p$  value = 0.000. Where the age group of 13-15 years is the age group of respondents who have the least level of knowledge, and the age group of 16-17 years is the age group that has a lot of good knowledge. This is in accordance with the theory put forward by [12] which states that in the Middle Adolescence group (13-15 years) adolescents tend to have developmental characteristics and attitudes, look and feel like looking for self-identity, have a desire to date or be related to of the opposite sex, deep feelings of love arise, the ability to think abstractly (imagine) is growing, imagining things related to sex and in the Late Adolescence Group (16-19 years) adolescents tend to show self-disclosure, in looking for peers more selective, has an image (picture, situation, role) of himself, has the ability to think imaginatively or abstractly that is better/mature. This is also in line with the theory put forward by [2] which states that a person's age greatly influences a person's comprehension and mindset. The more mature the age, the more mature the mindset will be, so that the knowledge obtained is getting better.

## **Multivariate analysis**

The results of the researchers in this study indicate that the three variables, namely the source of information, the environment where they live and the age of the respondent/ have a close and strong influence or relationship to knowledge. This is in accordance with the theory put forward by [7], that the source of information, the environment place of residence and age are factors that influence knowledge.

The rs guare value from information sources, living environment, and age is = 0.504, which means that the three variables contribute 50.4 % to knowledge, and the remaining 49.6% is contributed by other factors that are currently not participating. research researchers in this study. As for the contribution value of each variable, it can be calculated by means of the "standard coefficient of each variable multiplied by the correlation value between the variable and the level of knowledge", based on this formula it can be obtained that the contribution of information sources to the level of knowledge is  $0.252 \times 0.422 = 10.6\%$ , and the contribution of the living environment to the level of knowledge is  $0.282 \times 0.421 = 11.9\%$ , while the contribution of age to the level of knowledge is  $0.474 \times 0.588 = 27.9\%$ . So it can be seen that the one that has the most dominant contribution to the level of knowledge is age, which is equal to 27.9 % . This result is in line with the theory put forward by [8], which states that a person's age greatly influences a person's comprehension and mindset. The more mature the age, the more mature the mindset will be, so that the knowledge gained

## **4. CONCLUSION**

Respondents get the most information about | Knowledge of HIV-AIDS prevention is from electronic media, namely 53.8 % , and the majority of respondents, namely 64.8%, live with their parents, the age group of 13-15 years is. In the age group, the highest number of respondents was 56%, while for the level of knowledge, respondents who had good knowledge were 23.1%, and those who had less knowledge were 46.2%. There is a significant relationship

between information sources and adolescents' knowledge about HIV-AIDS prevention with a p value = 0.000. There is a significant relationship between living environment and adolescent knowledge about HIV-AIDS prevention with a p value = 0.000. There is a significant relationship between age and adolescents' knowledge of HIV-AIDS prevention with a p-value = 0.000. The three variables have a fairly strong relationship with adolescents' knowledge of HIV-AIDS prevention in which sources of information contribute 10.6% to knowledge, the environment. residence has a contribution of 11.9% to knowledge and age has a contribution of 27.9% to knowledge. And the most dominant contribution to knowledge is age, which is equal to 27.9 %.

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