

ADOLESCENT KNOWLEDGE ABOUT HIV/AIDS AT SMA KARTIKA I-2 MEDAN

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ABSTRAC

HIV/AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome) is a health problem in the world since 1981, this disease has developed in a pandemic. Medicines and vaccines to overcome this problem have not been found, which can result in losses not only in the health sector but also in the social, economic, political, cultural and demographic fields (MOH RI 2019). The design used in this research is descriptive in a quantitative manner, this research was conducted at SMA Kartika I-2 Medan starting from April - June 2024. The sampling technique used in this research was Simple Random Sampling with a sample of 77 people. The instrument used is a questionnaire, the analysis used is univariate. The results of this research show that knowledge about HIV/AIDS among teenagers at SMA Raksana Medan is known to respondents aged 14-16 years, namely 74.0%, respondents from the Batak tribe, namely 35.1%, respondents from the Muslim and Christian religions, namely 27 each. .3%, all respondents obtained information about HIV/AIDS from the mass media, 76.6% of respondents had a high school education, 50.6% of respondents' parents worked as entrepreneurs. And the majority of respondents had sufficient knowledge, namely 66 respondents (85.7%) and a small number of respondents had insufficient knowledge, namely 3 respondents (3.9%). This means that teenagers at Raksana High School only have sufficient knowledge about HIV/AIDS. It is hoped that the school will be more active in increasing efforts to prevent HIV AIDS in schools by increasing direct education to students at SMA Kartika I-2 Medan.

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INTRODUCTION

HIV/AIDS (Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome) is a health problem in the world since 1981, this disease has developed in a pandemic. Medicines and vaccines to overcome this problem have not been found, which can result in losses not only in the health sector but also in the social, economic, political, cultural and demographic fields (MOH RI 2019).

According to the World Health Organization (WHO), it was reported that in 2011 there were 3.5 million people in Southeast Asia living with HIV/AIDS. Several countries such as Myanmar, Nepal and Thailand show a downward trend in new HIV infections, this is attributed in part to the implementation of prevention programs

HIV/AIDS through the 100 percent Condom Use (CUP) program. The trend of deaths caused by AIDS between 2001 and 2020 is different in each part of the country. In Eastern Europe and Central Asia the number of people dying from AIDS increased from 7,800 to 90,000, in the Middle East and North Africa it increased from 000 to 35,000, in East Asia it also increased from 24,000 to 56,000 (WHO, Progress Report 2011).

The number of HIV cases in North Sumatra in 2011 was 1,251 cases, the cumulative number of AIDS until 2024 was 515 cases, in the city of Medan the number of HIV/AIDS cases from 2006 to 2011 was 2,904 sufferers (HIV 2,153 / AIDS 751), including occurs in the Homosexual group (3.68%), based on gender, the prevalence is higher in men (76%), based on the age group at the age of 25-34 years the prevalence is highest (57%), CFR (18.53%) (Medan city AIDS Prevention Commission, 2011).

Every year HIV/AIDS cases among teenagers in Indonesia need attention. The highest proportion of AIDS cases in the first quarter report in 2011 was reported in the 20-29 year age group (47.2%), where in this age group, some fell into the youth group (15-24 years),

Bekti, 2010). The results of the BKKBN survey stated that the age characteristics of potential clients who are most vulnerable to contracting HIV/AIDS are the youth group, namely 31%, consisting of 7% aged under 20 years and 24% aged between 20-24 years. The campaign coordinator for the Indonesian AIDS Foundation stated that teenagers are a population at risk of contracting HIV/AIDS because teenagers are easy targets for becoming consumers of narcotics and the sex industry (Kompas, 2009).

Adolescents are a group that is vulnerable to STIs (sexually transmitted infections) with the largest number suffering from HIV/AIDS. Adolescence is closely related to psychological development during the puberty period and is accompanied by sexual development. Adolescents also experience changes that include physical and emotional changes which are then reflected in attitudes and behavior. This condition causes teenagers to become vulnerable to risky behavior problems in the transmission of HIV/AIDS (Soetjningsih (ed), 2004).

Based on data from the North Sumatra Province AIDS Control Commission (KPA) in 2011, in North Sumatra there were 20,156 MSM people, in the city of Medan itself there were 6,348 MSM people spread across several sub-districts of the city of Medan, the iceberg phenomenon also applies to this community, in reality in The people of this community are hidden and more secretive in their existence, this is very worrying because it could increase the risk of someone who has sex with them contracting HIV/AIDS. Even though HIV/AIDS is a disease caused by infection with microorganisms, but apparently deep Its spread is greatly influenced by a person's behavior patterns and lifestyle (Yuwono, 2007 in Widodo, E. 2009). HIV/AIDS prevention efforts are primarily based in efforts to change the sexual behavior of someone who is at risk of infection and promote the use of condoms (Ministry of Health of the Republic of Indonesia, 2010).

In the initial survey that I conducted at SMA KARTIKA 1-2 Medan by conducting interviews with 10 students, with the results of

these interviews I found that students' knowledge about HIV/AIDS at SMA KARTKA I-2 Medan was still lacking.

METHOD RESEARCH METHODOLOGY

3.1 Research design

This type of research is quantitative with a descriptive design which aims to determine teenagers' knowledge about HIV/AIDS. (Notoatmodjo, 2024).

3.2 Location and Time of Research

This research will be carried out at RAKSANA High School Medan Petisah in June 2016, this research location was chosen because the preliminary survey I conducted in March 2016 showed that the knowledge of RAKSANA High School Medan Petisah students was still low.

3.3 Population and Sample

3.3.1 Population

Population is a generalized area consisting of subjects/objects that have certain qualities and characteristics that are applied by researchers to study and then draw conclusions (Sugiyono, 2022). The population in this study were all students of SMA KARTIKA 1 -2 Medan. The total population in this study was 319 students.

The sample is part of the number and characteristics of the population. The sample in this research was high school students

KARTIKA 1 – 2 Medan with little knowledge about HIV/AIDS. In this study the sample size calculated according to the Setiadi formula in 2024 is as follows:

$$n = \frac{n}{1 + n(d^2)}$$

Note:

n = sample size

n = population size d = desired level of confidence or accuracy of 90% (a = 0.1) with

Using this formula, the number of samples obtained is as follows:

$$n = \frac{319}{1 + 319(0.1^2)}$$

$$= \frac{319}{1 + 319(0.01)}$$

$$n = \frac{319}{4.19}$$

$$= 76.13 \text{ rounded to } 77$$

So the sample used in this research was 77 people. The sampling technique in this research is Simple Random Sampling. Simple Random Sampling is taking samples randomly without paying attention to the existing strata of the population members (Hidayat, 2020).

3.4 Data collection methods

The data collection method is the researcher's way of collecting data in research that uses measuring instruments to strengthen research results (Hidayat, 2021). The type of data used in this research is primary data, namely data obtained directly from respondents' answers and the results of interviews conducted by data collectors or data sources who directly provide data to data collectors (Sugiyono, 2023).

Secondary data in this research was obtained from reports and documents in the

field. Secondary data in this research was obtained from SMA KARTIKA 1-2 Medan. At the start of the research, the researcher submitted a request for permission to carry out research at an educational institution (Flora Health Sciences College) then the request for permission was obtained at the research location, namely SMA KARTIKA 1-2 Medan. Researchers carry out research data collection, the data collection method in this research is distributing questionnaires to respondents, after getting potential respondents, the researcher then explains the aims and benefits of the research, then prospective respondents who are willing will be asked to sign a letter of consent as respondents in this research. The researcher handed over the questionnaire sheet to the respondent and was encouraged to fill out the questionnaire with the guidance of the researcher

3.5.1 Variables

3.5 Variables and Operational Definitions

An independent variable is a variable that is the cause of change/can influence other variables or is also called an independent variable (Notoatmodjo, 2020).

The variable in this research is "Adolescents' Knowledge About HIV/AIDS".

3.5.2 Operational definition

Operational definition is providing operational definitions of research variables so that researchers are able to collect the required information related to the concept (Carmen, 2020 in Swarjana, 2022). The following are the operational definitions contained in this research:

3.6 Measurement Method

The measurement method with the instruments used in the research was made in

the form of a questionnaire prepared based on a literature review (Hidayat, 2022).

3.6.1 Demographic Data

Demographic data in this study contains respondent data regarding student data which includes respondent number, age, religion, ethnicity, highest level of education, occupation and monthly income. The way to fill out this questionnaire sheet is by marking the checklist in the box provided according to the respondent's answer.

3.6.2 Knowledge variables

The knowledge variable was measured using a questionnaire containing 30 closed statements using the Guttman Scale. The correct answer is given a score of 1, the wrong answer is given a score of 0. Of the 16 positive statements, they are located in statement numbers 1, 3, 5, 6, 7, 9, 10, 11, 12, 14 and 16 and the negative statements are located in statement numbers 2, 4, 8, 13 and 15. The highest total knowledge score is 16 and the lowest is 0. Based on the statistical formula with the highest score being 16 and the lowest score being 0 and the number of classes being 3 then:

- a. OK, if the total score for filling out the questionnaire is 76-100%, namely 12-16.
- b. Sufficient, if the total score for completing the questionnaire is 56-75%, namely 6-11.

c. Less, if the total score for completing the questionnaire is <56%, namely 0-The questionnaire used is valid because it was taken from research on the relationship between adolescent knowledge about HIV/AIDS and free sexual behavior in high school with a Cronbach's alpha result of 0.730, so the research instrument was declared reliable.

3.7 Data Analysis

3.7.1 Univariate Analysis

The data analysis used in this research is univariate analysis, namely to systematically determine teenagers' knowledge about HIV/AIDS.

3.8 Data Processing

3.8.1 Editing

Check the completeness of the data to be examined to see whether all the required data is complete, including the completeness of the requirements for the identity of the filler, the completeness of the questionnaire sheet and the completeness of the entries carried out at the data collection place, so that if there are any discrepancies it can be immediately completed by the researcher.

Test validity and reliability Measuring tools or research instruments that can be accepted according to standards are measuring tools that have gone through data validity and reliability tests (Hidayat, 2021).

Validity test is a measurement in observation which means the principle of instrument reliability in collecting data (Nursalam, 2023). The validity test aims to

determine the extent to which a measure or score indicates the level of reliability or validity of a measuring instrument by

3.8.2 Coding

The results of each questionnaire that has been collected are corrected again. Next, each questionnaire is coded and grouped to make data analysis easier.

3.8.3 Tabulation

Grouping or classifying research data according to the variables studied.

3.8.4 Entries

It is a process of entering data into a computer for further data analysis using the SPSS program.

3.9 Ethical Considerations

In carrying out research, there needs to be a recommendation from an educational institution or other party by submitting a request for permission to the Head of SMA KARTIKA 1-2 Medan. After obtaining approval, researchers conducted research using ethical principles which include:

3.9.1 Informed Consent

Researchers provide explanations to respondents who meet the criteria regarding the implementation of the research.

3.9.2 Anonymity

To maintain confidentiality, the researcher did not include the names of respondents, but the sheet was coded.

3.9.3 Confidentiality

The confidentiality of respondent information is guaranteed by the researcher and only certain groups of data will be reported as the

researcher's results measuring the correlation between variables or items with the total variable score which is indicated by the item correct correlation score in reliability statistics analysis (Nursalam, 2021).

The instrument reliability test is a test carried out to find out whether the measuring instrument can obtain consistent or constant measuring results (Notoadmodjo, 2022). Then the answers from the respondents processed

using computerized assistance. An instrument is said to be reliable if the coefficient is 0.70 or more, then the instrument is declared reliable (Riyanto, 2022).

RESULT AND DISCUSSION

4.1. Research result

4.1.1. Univariate Analysis

Univariate analysis in this research was carried out on 77 respondents from Kartika Medan High School students. This univariate analysis is to describe the characteristics of the respondents. The characteristics of the respondents consisted of age, ethnicity,

religion, sources of information, parental education and parental occupation. Respondent Characteristics Based on table 4.1 above, it is known that the majority of respondents were aged 14-16 years, namely 57 respondents (74.0%) and a small proportion of respondents were aged 17-19 years, namely 20 respondents (26.0%).

Table

4.3: Distribution of Respondents According to Religious Characteristics of Respondents at SMA KARTIKA 1-2 Medan

	Agama	Frequency (f)	Percent (%)
1	Islam	21	27.3
2	Hindu	14	18.2
3	Kristen	21	27.3
4	Budha	7	9.1
5	Katolik	10	13.0
6	Konghucu	4	5.2
	Total	77	100.0

Based on table 4.3 above, it is known that the majority of respondents are Muslim and Christian, namely 21 respondents each

(27.3%) and a small proportion of respondents were Confucian, namely 4 respondents (5.2%).

Table

4.4: Distribution of Respondents According to Characteristics of Respondents' Information Sources at SMA KARTIKA 1-2 Medan

Based on table 4.3 above, it is known that the majority of respondents are Muslim and Christian, namely 21 respondents each (27.3%) and a small proportion of respondents were Confucian, namely 4 respondents (5.2%).

Table 4.4: Distribution of Respondents According to Characteristics of

Respondents' Information Sources at SMA KARTIKA 1-2 Medan

Based on table 4.4 above, it is known that all respondents (100%) obtained information about HIV/AIDS from the mass media.

Table Based on table 4.5 above, it is known that the majority of respondents' parents had high school education, namely 59 people (76.6%) and a small percentage of respondent

Based on table 4.8 above, it is known that the majority of respondents have sufficient knowledge, namely 66 respondents (85.7%) and a small percentage of respondents have insufficient knowledge, namely 3 respondents (3.9%).

4.2. Discussion

a. Respondent Characteristics

Based on the frequency table in this study, it is known that the majority of respondents were aged 14-16 years, namely 57 respondents (74.0%) and a small proportion of respondents were aged 17-19 years, namely 20 respondents (26.0%). Most of the respondents were Batak, namely 27 respondents (35.1%) and a small number of respondents were Tamil, namely 14 people (18.2%). Most of the respondents were Muslim and Christian, namely 21 respondents (27.3%) each and a small number of respondents were Confucian, namely 4 respondents (5.2%). Wholerespondents (100%) obtained information about HIV/AIDS from the media. Most of the respondents' parents had a high school education, namely 59 people (76.6 and a small number of respondents' parents had a tertiary education. namely 18 people .Most respondents' parents' occupations were self-employed, namely 39 people (50.6%) and a small portion of the respondents' parents' occupations were farmers, namely 1 person (1.3%)

parents had tertiary education, namely 18 people (23.4%)Based on table 4.6 above, it is known that the majority of respondents' parents' occupations are self-employed, namely 39 people (50.6%).

b. Knowledge about HIV/AIDS at SMA KARTIKA I-2 Medan

Knowledge is the result of "knowing" which occurs after someone senses a particular object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears (Notoatmodjo, 2022).

Adolescents are a group that is vulnerable to STIs (Sexually Transmitted infections) with the largest number suffering from HIV/AIDS. Adolescence is closely related to psychological development during the puberty period and is accompanied by sexual development. Adolescents also experience changes that include physical and emotional changes which are then reflected in attitudes and behavior. This condition causes teenagers to become vulnerable to risky behavior problems in the transmission of HIV/AIDS (Soetjningsih, 2024).

HIV/AIDS cases in adolescents cannot be separated from the development of globalization. The development of globalization has resulted in social changes and lifestyles for today's teenagers, especially in urban areas. Kusuma (2022) states that teenagers in urban areas tend to engage in risky behavior such as sexual relations with multiple partners, premarital sex, and drug abuse. This kind of lifestyle endangers reproductive health, especially the possibility of transmission of sexually transmitted

diseases including HIV/AIDS when treated (Kusuma, 2022).

Based on the level of knowledge of respondents regarding the dangers of HIV/AIDS, it is known that respondents have sufficient knowledge, namely 66 respondents (85.7%) and a small number of respondents have Lack of knowledge, namely 3 respondents (3.9%). This means that not everyone understands HIV/AIDS because of knowledge

In general, they are quite broad about HIV/AIDS.

Age or longevity is the length of time lived or existed since birth. Age affects a person's knowledge, the older a person is, the easier it will be for that person to digest the

information obtained. This is because when adults or older people usually have a more mature brain so they can differentiate between good and bad. Adults or old people usually know more about something because it is based on their life experiences so far. Based on data from the 2023 Indonesian Demographic Health Survey (SDKI), it shows that around 34% of adolescent girls and 21% of adolescent boys aged 15-24 years have never heard of the terms HIV and AIDS. This means that young people still have minimal knowledge of information, so it is very important for teenagers at their current age to be educated about HIV/AIDS.

Basically, ethnicity and religion have no influence on a person's knowledge. Because the knowledge of someone from the same tribe or religion can vary according to the amount of information obtained. So that teenagers'

knowledge about HIV/AIDS is not influenced by their ethnicity and religion.

Information obtained from both formal and non-formal education can have a short-term influence resulting in changes or increases in a person's knowledge. As technology advances, various types of mass media will be available that can influence public knowledge. The existence of new information about something provides a new cognitive basis for the formation of knowledge about that thing. It is the mass media that plays an important role in providing teenagers with information about HIV/AIDS.

Education is an effort to develop personality and abilities inside and outside school and lasts a lifetime. Education influences the learning process, the higher a person's education, the easier it is for that person to receive information. With higher education, a person will tend to get information, both from other people and from the mass media. Knowledge is closely related to a person's education, where it is hoped that someone with higher education will have broader knowledge. So parents of teenagers with higher education will usually provide more education about HIV/AIDS to their children

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Based on this research, it is known that the description of the level of knowledge about HIV/AIDS among teenagers at SMA Kartika Medan is that respondents aged 14-16 years are 74.0%, respondents from the Batak tribe are 35.1%, respondents are Muslim and Christian, namely -27.3% respectively, all respondents obtained information about HIV/AIDS from the mass media, 76.6% of respondents had a high school education, 50.6% of respondents' parents worked as entrepreneurs.

Most of the respondents had sufficient knowledge, namely 66 respondents (85.7%)

and a small number of respondents had insufficient knowledge, namely as many as 3 respondents (3.9%). This means that teenagers at Kartika High School only have sufficient knowledge about HIV/AIDS. Adolescents should be the group most exposed to HIV/AIDS.

5.2 Suggestions

5.2.1 For Nursing Practice

It is hoped that the results of this research can provide input for nursing practice regarding HIV/AIDS knowledge.

5.2.2 For Nursing Education

It is hoped that the results of this research can become an additional reference for increasing the knowledge and insight of nursing students about HIV/AIDS

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