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ADOLESCENT PERSPECTIVES ON HIV PREVENTION: A DESCRIPTIVE STUDY OF HIGH SCHOOL STUDENTS

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ABSTRACT
The incidence of HIV in adolescents has increased. Teenagers who have high curiosity like to try new things and are driven by the progress of the times are vulnerable to promiscuity, so this makes teenagers vulnerable to the risk of contracting HIV. This vulnerability is to the Health Belief Model theory. This study aims to determine perceptions of HIV prevention at SMAN 1 Pangandaran. This research uses a quantitative descriptive method with a cross-sectional method. The population of this study was all students of SMAN 1 Pangandaran, totaling 1355 people. Sampling used the Stratified Random Sampling technique with a sample size of 104 people. Data were collected using The AIDS Health Belief Scale questionnaire (r0.52-0.93, (Cronbach alpha) a0.72). Data analysis uses descriptive statistics. Perception of susceptibility to HIV infection is in the medium range (57.7%), perception of the severity of HIV infection is in the high range (55.8%), perception of the benefits of HIV prevention is in the medium range (42.3%), and perception of barriers in HIV prevention is to the medium range (56.7%). The overall perception of students at SMAN 1 Pangandaran is good.

Keywords: adolescent; HIV; perception

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INTRODUCTION

Human Immunodeficiency Virus better known as HIV is a type of virus that attacks white blood cells and causes a decrease in human immunity (Kemenkes RI, 2020). As a result of this virus attacking the body's immunity, there will be a decrease in the body's resistance to fight various infections or diseases that attack the patient, and even as a result of this decrease in immunity, it can cause death. The initial symptoms felt by people with HIV disease are flu-like for 2 to 4 weeks with the initial spread of HIV disease through certain body fluids such as blood, semen, pre-seminal fluid, rectal fluid, vaginal fluid, and breast milk (CDC, 2024). HIV cases in the world are estimated to have affected 39 million people (UNAIDS, 2021). In the United States in 2021 there were 32,100 new cases of infection and 1.2 million people with HIV disease with 13% of them not knowing it and requiring testing (HIV.gov, 2023). Cases in Indonesia tend to fluctuate but the data continues to increase from year to year. The number of HIV cases in Indonesia until September 2023 was recorded at more than 500 thousand HIV cases (Wahyuni, 2023). Based on data from the HIV/AIDS Information System (SIHA) in 2023, there were 8,307 HIV cases in West Java (Zulkarnaen, 2023). The total number of HIV patients in Pangandaran Regency was 115 in July 2022 collected from the Pangandaran Regency Health Office (Arifin, 2022).

Pangandaran Regency, which is one of the tourist destinations frequented by local and foreign tourists, should start to be vigilant because of this case of transmission of HIV infection. There is a possibility from the data it has presented even greater cases of transmission of disease from HIV because it has not been evenly distributed or there is no awareness to check CD4 for people who are vulnerable to HIV. One of the groups that are vulnerable to HIV is the adolescent population. Data collected by the Indonesian Ministry of Health in 2021 showed that 51 percent of new HIV cases detected were among adolescents (Kemenkes RI, 2022). This is due to the high prevalence of HIV in adolescents (WHO, 2022). From previous research, it was stated that in 2017 HIV existed in 48,300 cases with 69.2% contracting HIV from the age of 10-18 years (Darmawati1, 2021). This high incidence of HIV in adolescents is in line with research conducted by the Linkage of Quality Care for Young Key Populations (LOLIPOP) in the journal Lindayani, (2015) which states that 91% of unsafe sexual behavior in adolescents aged 15-19 years in Bandung City has sexual intercourse before marriage. There is a change in the spread of HIV infection, which was initially largely caused by needles used by drug abusers for unsafe sexual behavior (Lindayani, 2015). This can be caused by technological advances and easy access for adolescents to view pornographic content. The effect caused by this on adolescents is curiosity and a sense of wanting to channel sexual desires that end up wanting to have sexual intercourse with the opposite sex unsafely (Afriliani et al., 2023)

HIV infection is caused by a lack of education about HIV in the community, in this case, adolescents. They feel that this disease causes taboos or curses as a result of promiscuity. As a result, they become less sensitive and responsive to HIV prevention, so they sometimes ignore this disease. Therefore, adolescents need to increase their knowledge of ways to prevent HIV so that their perceptions of HIV increase (Ayu et al., 2020). Increasing the perception of preventing HIV among adolescents is one of the keys to preventing HIV transmission among adolescents. One model approach to perception is using the Health Belief Model. This model explains health behavior based on individual beliefs and perceptions. This model focuses on perceived severity, perceived vulnerability, perceived benefits, perceived barriers, and HIV prevention behavior (Umam et al., 2017). The Health Belief Model has been widely used in research on HIV prevention and has proven useful in understanding and predicting HIV-related behaviors in various populations including adolescents (Apriliani et al., 2020).

The preliminary study through informal interviews on October 5, 2023, found that all had been exposed to HIV prevention education when the respondents entered the high school during the Masa Pengenalan Lingkungan Sekolah (MPLS) and through posters posted by the Pusat Informasi dan Konseling Remaja (PIK-R). Two out of ten students received HIV education at the provincial level. Respondents also received information about HIV from the social media they use. All respondents said that the community does not shun people with HIV but they should try to be embraced. For perceptions on HIV prevention, most respondents mentioned HIV prevention correctly. The purpose of this research is to see the perception of students of SMAN 1 Pangandaran in preventing the spread of HIV.

METHOD

This research design is descriptive and quantitative with a cross-sectional approach to see the perception of students in HIV prevention at SMAN 1 Pangandaran. This study uses a cross-sectional approach, where researchers will only collect data once at the research site (Arikunto, 2014). This study has obtained a research ethics permit from the Research Ethics Commission of Padjadjaran University with ethics number 239/UN6.KEP/EC/2024. The

variable of this study is the perception of HIV with the sub-variables studied consisting of perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. The population in this study were all students of SMAN 1 Pangandaran with a total of 1,355 students. The data was collected in March 2024. Sampling in this study uses the Stratified Random Sampling technique. Withdrawing the number of samples using the Slovin formula so that the sample used was 104 students. The instrument used is the AIDS Health Belief Questionnaire. The AIDS Health Belief Questionnaire was adapted and modified from The AIDS Health Belief Scale developed by Zagumny & Brady (1998), but what was used in this study was The AIDS Health Belief Scale which has been modified by Umam (2017) in Indonesian into the AIDS Health Belief Questionnaire. This instrument consists of 16 questions with 4 questions per sub variable, each question is measured using a 5-point Likert scale with the highest value of 5 for a "strongly agree" response and the lowest value of 1 for a "strongly disagree" response. The results of the validity test of AIDS Health Belief Quesioner (r=0.52- 0.93, (Cronbach's alpha) a=0.72), and the reliability test of AIDS Health Belief Quesioner in Indonesian are perceived susceptibility (Cronbach's alpha) a=0.83; perceived severity (Cronbach's alpha) α=0.70; perceived benefits (Cronbach's alpha) α=0.72; perceived barriers (Cronbach's alpha) α=0.79. The instrument was created using Google Forms and then distributed to WhatsApp groups of students who entered the research criteria. The data analysis used in this study was categorical univariate data analysis, which aims to describe variables based on the data obtained. Demographic data and perceptions of HIV prevention were analyzed univariately, and the results were presented in the form of frequency distributions in tabular form. The results of the filling obtained were summarized and analyzed univariately using Microsoft Excel and IBM Statistics applications. The category of low perception level was scored (4-11), medium perception level was scored (12-15), and high perception level was scored (16-20).

RESULTS

Table 1, the characteristics of respondents are based on class, the majority are in class 10 as much as 51%. The distribution of school majors with the highest frequency is in the Natural Sciences (IPA) department with a frequency of 72.1%. Most respondents were 16 years old as much as 32.7% followed by the second most with an age of 26.9%. The majority of respondents were female with a total of 65.4%. The majority of respondents reside in Pangandaran Sub-district with a total of 79.8%. 95.2% of respondents live with their parents. The majority of respondents' parents' income is below or equal to the minimum wage of Pangandaran Regency with 65.4% of respondents. 62.5% of respondents had never attended HIV counseling/socialization. All respondents had never had sexual intercourse.

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Table 1.
Respondent characteristics (n= 104)

Respondent characteristics	f	%
Class		
X	53	51
XI	25	24
XII	26	25
Major		
Natural Science (IPA)	75	72.1
Social Science (IPS)	29	27.9
Gender		
Male	36	34.6
Female	68	65.4
Addres		
Kalipucang	9	8.7
Padaherang	2	1.9
Pangandaran	83	79.8
Sidamulih	10	9.6
Living with Parents		
Yes	99	95.2
No	5	4.8
Parets' income		
Below to the minimum wage of Pangandaran Regency	68	65.4
Above UMK Pangandaran Regency	36	34,6
Ever attended HIV counseling/socialization		
Yes	39	37.5
No	65	62.5
Ever had sexual intercourse		
Yes	0	0
No	104	100

Table 2.
Distribution by Perception of HIV Prevention (n= 104)

Perception	Categoric					
	Low		Medium		High	
	f	%	f	%	f	%
Perceived Susceptibility	25	24	60	57.7	19	18.3
Perceived Severity	6	5.8	40	38.5	58	55.8
Perceived Benefit	13	12.5	47	45.2	44	42.3
Perceived Barriers	37	35.6	59	56.7	8	7.7

Table 2, it is found that the highest perceived susceptibility is medium with (57.7%), for perceived severity the highest is in the high category with (55.8%), for perceived benefits is in the medium category with (45.2%), and for perceived barriers the highest is in the medium category with (56.7%).

DISCUSSION

Prevention of the spread of HIV among adolescents is by not having sexual intercourse before marriage (Fitriyani et al., 2020). This study is in line with the result of this research, where all respondents have never had sexual intercourse before marriage. This factor is caused by students' good knowledge and understanding of HIV prevention. Knowledge and understanding of HIV prevention can be obtained by attending education about HIV. This is in line with the WHO statement which states that the behavior of not having sexual intercourse during adolescence or before marriage is one way to prevent HIV infection (WHO, 2023). Education received by students will increase their knowledge and

understanding of the disease and how to prevent HIV. Good knowledge and understanding of HIV will lead students to positive perceptions of HIV prevention. In addition to educational factors in students, parental factors can also make students' perceptions of HIV prevention positive.

In previous research, the role of parents in educating children is very decisive in character-building and child development (Muslimin et al., 2022). This role can be done by parents if there is closeness between parents and their children. The research that has been done mentions 95.2% of students live with their parents, meaning that students get a good parental role, which can make students higher in positive behavior toward HIV prevention. This happens because at this time students must have control over the exploration of sexuality (Afriliani et al., 2023). One approach to see how HIV prevention is using the Health Belief Model (HBM). This model has been widely used in public health research and practice, particularly in the context of HIV/AIDS prevention and care and HBM argues that health prevention behaviors are more likely to occur when perceived susceptibility, perceived severity, and perceived benefits are high and perceived barriers are low. HBM argues that preventive health behavior is more likely to occur when perceived vulnerability, perceived severity, and perceived benefits are high and perceived barriers are low (Umam et al., 2017). Furthermore, this model is used to explain how individuals living with HIV/AIDS perceive the benefits of certain behaviors and how these perceptions can lead to behavior change (Apriliani et al., 2020).

Perceived vulnerability is a response or argument regarding whether or not a person is easily infected with HIV, including the specific consequences of sexual risks and actions taken. Perceived vulnerability is a subjective perception of a person is facing the risk of a disease (Wayne, 2022). Based on research, the majority of students 57.7%, have a moderate perception of vulnerability to HIV/AIDS, with an adequate level of understanding of its transmission. This is in line with HBM which states that individuals will be motivated to take health precautions if they have the perception that they are vulnerable to the disease. Previous research conducted by Diah Ratnawati & Anggraini (2021) stated that there was a significant relationship between gender and prevention of HIV in adolescents. There is a significant relationship because someone with females gender that women have higher levels of anxiety due to excessive autonomic nervous responses, which include increased sympathetic system, increased norepinephrine, increased catecholamine release, and abnormal disturbances in serotonergic regulation (Demak & Suherman, 2016). In this study 65.4% of respondents were female, this makes the prevention of HIV good and makes the perception of vulnerability also in the medium category.

Perceived severity according to Rosenstock in the journal Umam (2017) states that perceptions of perceived severity are often based on medical information or knowledge. It may also come from a person's beliefs about the difficulties posed by a disease. Based on Table 2, it was found that most students were in the high category (55.8%). students have a high perception of the severity of HIV/AIDS symptoms, indicating an adequate level of awareness. This is in line with HBM which states that individuals will be more motivated to seek treatment if they realize the severity of the disease. Research has shown a relationship between family income and quality of life in implementing health behaviors (da Costa et al., 2014). In this study, 65.4% of parents' income was at or below the minimum wage of Pangandaran Regency. However, this study is not in line with the research that has been conducted, it was found that most students were in the high category (55.8%). students have a high perceived severity of HIV/AIDS symptoms, indicating an adequate level of awareness.

This is in line with the HBM which states that individuals will be more motivated to seek treatment if they realize the severity of the disease.

This includes beliefs about the effectiveness of recommended preventive health measures, such as consistent and correct condom use to prevent HIV/AIDS (Umam et al., 2017). Perceived benefits are very important in influencing individual confidence in taking action because of the expected results. Based on research, it was found that most students were in the moderate category (45.2%). This is in line with previous research studies that use the same approach. In previous studies, the results were obtained in the moderate category and the number of respondents was 296 people (Umam et al., 2017). Perceived barriers are an individual's evaluation of the barriers to adopting a new behavior (Umam et al., 2017). Perceived barriers can be an obstacle to taking action and can lead to a conflict of avoidance motives, thus potentially inhibiting health behavior change. Based on Table 2, it was found that most students were in the moderate category (56.7%). In this study, students were good at perceiving barriers and they did not show confusion in implementing steps in HIV prevention. However, it is still necessary to provide education so that the perception of barriers in students is getting lower because when the perception of barriers is low, it will make students better at HIV prevention.

A previous study conducted on high school students in Denpasar stated that there was a significant relationship between knowledge and perception (Mahardani et al., 2022). In this research, 62.5% of students have never attended socialization about HIV prevention. However, the perception of student barriers is in the moderate category. The students get knowledge not only from socialization through health education provided by the public health center or related agencies. They get HIV prevention information from posters in the wall magazine pasted by Pusat Informasi dan Konseling Remaja (PIK-R) and they get information from social media. This is what makes students gain knowledge and understanding of HIV prevention. Only by increasing a good understanding of how HIV/AIDS is transmitted, symptoms, and prevention, can we collectively reduce the spread of this virus and improve overall public health.

CONCLUSION

Based on the results of the study, the perception of susceptibility (perceived susceptibility) of contracting HIV is in the medium range (57.7%), the perception of severity (perceived severity) of HIV infection is in the high range (55.8%), perceived benefits of HIV prevention is in the medium range (42.3%), and perceived barriers to HIV prevention is in the medium range (56.7%). Overall, the perceptions of students of SMAN 1 Pangandaran are good but there should still be education about HIV prevention so that students have high perceptions of vulnerability, severity, and benefits and have low perceptions of barriers.

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