

Analysis of Behavioral Risk of HIV/AIDS Transmission Based on Plan Behavior Theory (TPB) in Adolescents



Yulandi Koem¹, Irwan², Silvia Flora Ninta Tarigan³

^{1,2,3} Department of Public Health, Postgraduate, Gorontalo State University, Gorontalo City, Indonesia

ABSTRACT: Supervision of students is carried out together with educators and parents because the learning process can reduce juvenile delinquency, including drug abuse and the spread of HIV/AIDS, so with the educational process, some students who have the potential to behave positively will become examples, icons or ambassadors for each other, in school. This research analyzes risk factors for HIV/AIDS transmission in adolescents based on knowledge, attitude, gender, and socio-economic status. The type of research used is observational research with a Cross-Sectional Study design. This type of research is based on collecting and analyzing data in numerical form, namely quantitative research with a sample size of 187 teenage students at SMA Negeri 1 Limboto, Gorontalo Regency, consisting of class 10, class 11th, and 12th grades. Research results show that there is a relationship between knowledge and risk behavior for HIV/AIDS transmission in adolescents (p -value $0.025 < 0.05$), there is a relationship between attitude and risk behavior for HIV/AIDS transmission in adolescents (p -value $0.036 < 0, 05$), there is a relationship between religious adherence and risk behavior for HIV/AIDS transmission in adolescents (p -value $0.013 < 0.05$). The research conclusion is that knowledge, attitudes, and religious observance are related to the risk of HIV/AIDS transmission based on the Plan Behavior theory in adolescents.

KEYWORDS: HIV/AIDS, Plan Behaviour Theory (TPB), Adolescents.

I. INTRODUCTION

Education units are synonymous with tiered and varied schools, so education units are required to carry out a positive learning process with the supervision of all school members. Maintenance of students is carried out together with educators and parents because the learning process can reduce juvenile delinquency, including drug abuse and the spread of HIV/AIDS, so with the education process, some students who have the potential to behave positively will become examples, icons or ambassadors for each school.

Human Immunodeficiency Virus (HIV) or Acquired Immunodeficiency Syndrome (AIDS) is a pandemic in every country. The number of people living with HIV and AIDS is increasing worldwide, from 36.6 million in 2020 to 39.4 million in 2021. An estimated 8.2 million people are now living with HIV and AIDS in Asia 2,3 million of them are teenagers and women. In 2021, there will be 40.3 million people living with HIV worldwide. Worldwide, 4.9 million new cases have been detected, and 3.1 million people have died from AIDS.

At the end of the first quarter of 2020, 5,991 new HIV cases were reported, according to Ministry of Health data. Meanwhile, the number of HIV cases reported from 1987 to March 2012 was 82,870. Among reported cases, the highest risk factors for HIV are using non-sterile syringes for unprotected sex and drug use (Ministry of Health, 2021). Analysis of the results of the 2019 HIV survey and study by KPAN and UNICEF concluded that almost all respondents under 25 years of age had started risky behavior based on the age of the population most at risk of HIV (93% of MSM (having sex with men and boys)), 83% use injecting drugs, 83% are Guardians, and 53% are FSW (Female Sex Workers). The results also reveal that the most vulnerable demographics are more likely to continue using condoms on younger people (under 25 years) than on older people (over 25 years old).

According to Gorontalo Provincial Health Service data, HIV/AIDS cases among teenagers are increasing in Gorontalo Regency. In 2022, 63 young men and women will be infected with HIV and AIDS. In Gorontalo Regency, there was the first AIDS sufferer infected with HIV and one person with AIDS. So far, the number of HIV and AIDS cases is expected to increase in 2022 in line with economic progress and development in Gorontalo Regency. The highest increase in new infections occurred in 2021, with 114 new HIV and AIDS cases, including 66 new HIV cases and 48 AIDS cases. (Gorontalo District Health Service, 2022).

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Sexual behavior determines adolescent health. Adolescent sexuality includes experiences and activities such as first sexual intercourse, number of sexual partners, frequency of sexual intercourse, and use of contraception to avoid the risk of pregnancy and sexually transmitted infections. Risky sexual behavior is one of the determinants of adolescent health status; morbidity and death are caused by adolescents not taking precautions against risk factors (Aziz et al., 2020).

The relationship between attitudes and behavior above is still too far away, even though attitudes have been measured thoroughly and precisely. This shows that there are still factors that act as a link between attitudes and behavior, namely intentions. Intention is an individual's statement about their intention to carry out a specific behavior. This measurement of intention is very useful for predicting behavior, especially for conducting research where it may be difficult to measure actual behavior directly for various reasons (Ilham et al., 2020).

Religious teachings are values or norms that a person believes in and are considered when acting. A person who is obedient to religion tends not to commit acts contrary to his religion's teachings. Obedience to the practice of religion is a form of worship carried out continuously by a person towards his faith and is routine and must be carried out by humans (Cochran et al. 2019).

The background shows that the risk factors for HIV/AIDS transmission in adolescents are more dominant in internal aspects, individual adolescents and family aspects, social environment, and information media. Therefore, this research aims to analyze the Risk Behavior of HIV/AIDS Transmission Based on Plan Theory. Behavior (THB) in Adolescents.

II. MATERIAL AND METHOD

The type of research used is observational research. with a Cross-Sectional Study plan. The research population was all SMU Negeri 1 Limboto, Gorontalo Regency students, totaling 1134 students. The sample is students of SMU Negeri 1 Limboto who meet the criteria determined by the researcher as follows:

a. Inclusion Criteria

1. Students who are registered as active students at SMA Negeri 1 Limboto
2. Willing to be a sample stated with written consent
3. Settled in the Limboto district, Gorontalo Regency

b. Exclusion Criteria

1. This does not include students who are registered as active students at SMA Negeri 1 Limboto.
2. Not willing to be a sample stated with written consent
3. Not settled in the Limboto district, Gorontalo Regency

The sampling method was proportional simple random sampling using the sample size formula according to Slovin to obtain a sample size of 187 people. This research uses statistical tests appropriate to the data scale and is processed using a computer using the SPSS application with the chi-square analysis test. The relationship criteria are carried out by looking at the p-value. The significant test was carried out using the conditional limits ($\alpha > 0.05$). If the P value is < 0.05 , there is a substantial relationship between the independent and dependent variables. If the P value is > 0.05 , there is no significant relationship between the independent and dependent variables.

III. RESULTS AND DISCUSSION

The Relationship between Knowledge and Risk Behavior for HIV/AIDS Transmission in Adolescents

Table 1. Relationship between knowledge and risk behavior for HIV/AIDS transmission in adolescents

Knowledge	Behavior		Total		p-value	
	Risky	%	No Risk	%		
Good	55	29.4	81	43.3	0.025	
Enough	20	10.7	18	9.6		
Not enough	10	5.3	3	1.6		
Total	85	45.5	102	74.3	187	100

Source: Primary data, 2023

Table 1 shows that of the 187 students, 55 (29.4%) had good knowledge of risky behavior, and 81 (43.3%) had no risky behavior. For students with sufficient knowledge, there were 20 people with challenging behavior (10.7 %) and 18 with non-risky behavior (9.6%). Students with less understanding of risky behavior were 10 people (5.3 %), and non-risky behavior was 3 people (1.6%). Based on the chi-square test results, the p-value = 0.025 < 0.05, so it can be concluded that a significant relationship exists between students' knowledge.

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The Relationship between Attitudes and Risk Behavior for HIV/AIDS Transmission in Adolescents

Table 2. Relationship between attitudes and risk behavior for HIV/AIDS transmission in adolescents

Attitude	Behavior				Total		p-value
	Risky	%	No Risk	%	n	%	
Good	41	21.9	58	31.0	99	52.9	0.036
Enough	25	13.4	35	18.7	60	32.1	
Not enough	19	10.2	9	4.8	28	15.0	
Total	85	45.5	102	74.3	187	100	

Source: Primary data, 2023

Table 2 shows that out of 187 students, 41 (21.9%) had good attitudes toward risky behavior, and 58 students with non-risky behavior (31.0%). For students with sufficient knowledge, there were 25 people with challenging behavior (13.4 %) and 35 with non-risky behavior (18.7%). Students with less understanding about risky behavior were 19 people (10.2 %), and non-risky behavior was 9 people (4.8%). Based on the chi-square test results, the p-value = 0.036 < 0.05, so it can be concluded that a significant relationship exists between students' knowledge.

Relationship between religious adherence and risk behavior for HIV/AIDS transmission in adolescents

Table 3. Relationship between religious observance and risk behavior for HIV/AIDS transmission in adolescents

Religious Compliance	Behavior				Total		p-value
	Risky	%	No Risk	%	n	%	
Good	51	27.3	73	39.0	124	66.3	0.013
Enough	13	7.0	20	10.7	33	17.6	
Not enough	21	11.2	9	4.8	30	16.0	
Total	85	45.5	102	74.3	187	100	

Source: Primary data, 2023

Table 3 shows that of the 187 students, 51 (27.3%) had good religious observance, and 73 (27.3%) had no risky behavior. For students whose religious adherence was sufficient, there were 13 people with challenging behavior (7.0 %) and 20 with non-risky behavior (10.7%). There were 21 students with less religious adherence to risky behavior (11.2 %) and 9 with non-risky behavior (4.8%). Based on the chi-square test results, the p-value = 0.013 < 0.05, so it can be concluded that a significant relationship exists between students' religious adherence.

DISCUSSION

The Relationship between Knowledge and Risk Behavior for HIV/AIDS Transmission in Adolescents

The results of research conducted at SMA Negeri 1 Limboto, Gorontalo Regency, were obtained from 187 students. It was found that 55 students (29.4%) had good knowledge of risky behavior, and 81 people (43.3%) had no risky behavior. For students with sufficient knowledge, there were 20 people with challenging behavior (10.7 %) and 18 with non-risky behavior (9.6%). Students with less understanding of risky behavior were 10 people (5.3 %), and non-risky behavior was 3 people (1.6%). Based on the chi-square test results, the p-value = 0.025 < 0.05, so it can be concluded that a significant relationship exists between students' knowledge.

This condition is due to variations caused by students' ability to receive information and education related to HIV/AIDS in extracurricular activities organized by the school and education received by students through related agencies, both community health centers and the local Health Service. Based on research in the field, it was found that there were students who did not know what HIV/AIDS was and how it was transmitted and prevented, so students' knowledge about HIV/AIDS was very minimal. This research is supported by the theory of Notoatmodjo (2010), which suggests that knowledge can come from one's own experience or the experience of others, usually before knowledge and then having the initiative to act on the knowledge possessed. Knowledge (cognitive) is a critical area in shaping a person's behavior, and knowledge is the basis for working, usually preceded by knowing and then having the initiative to carry out an action based on the knowledge one has. Knowledge (cognitive) is significant in shaping a person's behavior. Patient and family knowledge about disease and self-care will lead to more independent activities and growing awareness of family self-care after stroke.

This research is in line with the study conducted by Patmasari et al. (2021), who found that there is a significant relationship between knowledge and behavior with a value of p = 0.011 (p<0.05) with a weak correlation level, r = 0.221. This correlation level

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has a positive or directly proportional r number so that the higher the student's knowledge, the more positive the student's HIV/AIDS prevention behavior will be.

Knowledge is influenced by and closely related to elements of formal education. Knowledge will likely increase with higher education. But people who are not educated are not necessarily knowledgeable. Advanced knowledge does not have to be obtained through formal education but can also be obtained through informal education. Subject knowledge has two dimensions: positive and negative. Both parties determine a person's attitude. The more positive aspects or objects one knows, the more positive the attitude toward a particular thing will be

The Relationship between Attitudes and Risk Behavior for HIV/AIDS Transmission in Adolescents

The results of research conducted at SMA Negeri 1 Limboto, Gorontalo Regency, showed that out of 187 students, 41 students (21.9%) had good behavior with risky behavior, and 58 people (31.0%) had no risky behavior. For students with sufficient knowledge, there were 25 people with challenging behavior (13.4 %) and 35 with non-risky behavior (18.7%). Students with less understanding about risky behavior were 19 people (10.2 %), and non-risky behavior was 9 people (4.8%). Based on the chi-square test results, the p -value = $0.036 < 0.05$, so it can be concluded that there is a relationship between students' knowledge at SMA Negeri 1 Limboto, Gorontalo Regency.

Research results on teenage students' attitudes at SMA Negeri 1 Limboto generally have more good attitudes. This is caused by the presence of teenagers in the school environment who depend a lot on their peers' interaction, so responding to the school must be more intense in providing an approach towards students. Who has a bad attitude.

This research is in line with the study conducted by Saifudin Azwar (2010), which found that there was a significant relationship between knowledge and behavior with a value of $p = 0.011$ ($p < 0.05$) with a weak correlation level, $r = 0.221$. This level of correlation has a positive or directly proportional r number so that the better the student's attitude, the more positive the student's HIV/AIDS prevention behavior will be.

This research is supported by Notoatmodjo (2010), who says that attitude is a reaction or response to somebody who is still close to something, a stimulus, or an object. Attitude is gathering symptoms in response to a stimulus or object involving thought, feeling, attention, and mental other. Newcomb, Wrong, an expert psychology social, states that attitude is a readiness or willingness to act and is not the implementation of specific motifs. In other words, attitudes are not yet actions (reaction open) or activities but are predisposition behavior action or reaction closed. Involve thought, feeling, attention, And the symptoms of mental other.

Wrong expert psychology social states that attitude is a readiness or willingness to act and does not implement specific motifs. In other words, attitudes are not yet actions (reaction open) or activities but are predisposition behavior action or reaction closed.

Based on several expert opinions regarding attitude, it can be concluded that attitude is a reaction or response in the form of an assessment that arises from an individual towards an object. Attitude is also a manifestation of awareness of the environment. The process that initiates the formation of attitudes is that things around the individual provide a stimulus that then hits the individual's sense organs. The information captured about the object is then processed in the brain, giving rise to a reaction. The judgments that emerge, positive or negative, are influenced by previous information or the individual's personal experience. Human attitudes are not formed from the moment humans are born. Human attitudes are formed through social processes during their lives, where individuals gain information and experience. This process can take place within the family, school, or community. When a social process occurs, a reciprocal relationship occurs between individuals and their surroundings.

The Relationship between Religious Adherence and Risk Behavior for HIV/AIDS Transmission in Adolescents

The results of research conducted at SMA Negeri 1 Limboto, Gorontalo Regency, show that of 187 students, 51 students (27.3%) had good religious compliance, 51 people (27.3%) had risky behavior, and 73 people did not have risky behavior (39%). For students whose religious adherence was sufficient, there were 13 people with problematic behavior (7.0 %) and 20 with non-risky behavior (10.7%). There were 21 students with less religious adherence to risky behavior (11.2 %) and 9 with non-risky behavior (4.8%). Based on the chi-square test results, the p -value = $0.013 < 0.05$, so it can be concluded that a significant relationship exists between students' religious adherence at SMA Negeri 1 Limboto, Gorontalo Regency.

Based on the results of research on religious adherence to the risk of HIV/AIDS transmission among young students at SMA Negeri 1 Limboto, Gorontalo Regency, in general, they have exemplary religious commitment. This is because the school always holds extracurricular activities in the religious sector, such as weekly religious lectures and study activities. -other religious studies carried out in the school environment.

This research is related to Michel Meyer in Rousydiy, who believes that religion is a collection of beliefs and teachings that direct us in our behavior toward Allah SWT, fellow humans, and ourselves. Religion strongly encourages its adherents to behave well, be responsible for all their actions, and actively try to improve themselves to become better. Based on the definitions above, religion

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is all beliefs accompanied by the religious teachings adhered to. Religion also influences motivation in encouraging individuals to carry out an activity because actions carried out with a background of religious beliefs are considered to have elements of purity and obedience. This connection will influence a person to do something.

Meanwhile, religion is an ethical value because, in acting, a person will be bound by the provisions regarding what is permissible and what is not acceptable according to the teachings of the religion he adheres to. Other scholars have explained religion as a form of action driven by the curiosity of the human mind. This urge makes humans move to find out the cause of something, especially the reason or first creator of everything. This is where we come to the various features of religion. Religion is always shown to be able to explain the world and to reunite the human mind by clearing it of multiple problems that plague it. Religion also guides humans through a view that allows them to see all parts of the world and life as they should be. This definition also needs to explain what is meant by religion. Curiosity and the desire to find out are not just religious but tend to be philosophical. Apart from that, other motifs are related to science that have emerged since humans first made offerings. Curiosity drives humans to find out the first cause of everything; in religion, he found something that could promise to explain the world to him, and that could explain it to himself.

IV. CONCLUSION

The research conclusion is that knowledge, attitudes, and religious observance are related to the risk of HIV/AIDS transmission based on the Plan Behavior theory in adolescents.

ACKNOWLEDGEMENT

The authors declare no conflict of interest and no involvement of sponsors or funding for this research.

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