



## **The Influence of Perceptions of Social Support and Family Health Tasks on HIV/AIDS Prevention Behavior in Adolescents**

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### **Abstract**

Adolescents are physically and psychologically vulnerable to the transmission of HIV/AIDS, so that they become the focus of the population for disease prevention programs. This study aims to determine the effect of perceptions of social support and family health tasks on HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. This study employed a quantitative research method with a cross-sectional design. The number of samples was 345 adolescents who were at risk of HIV/AIDS in Baros Village, Serang, Banten. Sampling from each class administering stratified sampling method. Researchers reproduced research questionnaires with an offline system which had previously been examined for the validity and reliability of a number of samples that have been calculated. Furthermore, for research questionnaires with an online system, distribution is conducted via a link from the google form. The chi-square test was administered to examine HIV/AIDS prevention behavior variables. A logistic regression test was used to see the most influential factors on HIV/AIDS prevention behavior. The results revealed a relationship between gender and family health tasks in recognizing HIV/AIDS prevention behavior problems in adolescents in Baros Village, Serang, Banten, with a p-value <0.05. The factor that most influenced HIV/AIDS prevention behavior was the family health task in recognizing problems with a p-value of 0.007 <0.05 with the largest OR value obtained, which is 1.978. Therefore, families should improve their ability to conduct health tasks in communicating and directing adolescents in HIV/AIDS prevention behavior.

**Keywords:** Adolescents, HIV/AIDS, Family Health Tasks.

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## 1. INTRODUCTION

According to the World Health Organization, (2012), adolescents are residents in the age range of 10-19 years. The Regulation of the Minister of Health of the Republic of Indonesia Number 2005 of 2014 states that adolescents are residents in the age range of 10-18 years, while from the Population and Family Planning Agency (BKKBN), the age range of adolescents is 10-24 years and unmarried (Kementerian Kesehatan Republik Indonesia, 2014). The number of adolescents in Indonesia is 17% of the entire population of Indonesia (Kementerian Kesehatan Republik Indonesia., 2018). In Banten Province, adolescents reached 3,435,822 people or 29.07% of the total population in Banten (Dinas Kesehatan Provinsi Banten, 2011). This large population of teenagers is a great resource for administering development to realize an advanced, independent, competitive, prosperous and moral Banten in accordance with the vision of the Banten Provincial Government.

However, adolescents generally possess an unbalanced emotional turmoil. Thus, they are easily affected by the influence of the environment. The phenomenon of adolescent health problems if not treated can increase the disease Human Immunodeficiency Virus/HIV and Acquired Immunodeficiency Syndrome/AIDS which is a disease that continues to grow and become a global problem in the world. The incidence of HIV/AIDS is a concern in the Sustainable Development Goals (SDGS), which is stated in the third goal.

Based on data from the Directorate General of P2PL (Disease Control and Environmental Health), statistics on HIV/AIDS cases reported from 2011-2012 have increased, which is in 2011, new cases of HIV were 21,031 cases, then increased to 21,511 cases in 2012. Likewise with AIDS from 2011, it was 37,201 cases, increasing to 42,887 cases in 2012. The proportion of risk factors for HIV/AIDS sufferers through heterosexual intercourse is the mode of transmission with the highest percentage at 77.75%, followed by IDUs or injecting drug users (IDU) at 9.16% and from mother to child by 3.76% (Kementerian Kesehatan Republik Indonesia, 2014).

The Adolescent Reproductive Health Program is integrated into the Adolescent Health Program in Indonesia. The Youth Care Health Program (PKPR) has been launched since 2003. For more than ten years, this program has been mostly engaged in providing information, in the form of lectures, questions and answers with youth about health problems through the School Health Business (UKS), Karang Taruna (Youth Organization), or other youth organizations and other youth cadres formed by the Puskesmas (Primary Health Center). PKPR activities are in the form of health services for adolescents that access all groups of adolescents, which are acceptable, appropriate, comprehensive, effective and efficient. Banten Province is a province with HIV/AIDS cases with low knowledge of HIV/AIDS prevention in Indonesia (Kementerian Kesehatan Republik Indonesia., 2018). Thus, Banten is an area that requires efforts to prevent and control HIV/AIDS through health education and healthy life skills for its youth. Information about the knowledge, attitudes, and behavior of adolescents is needed to design these prevention and control efforts.

Teenagers spend a lot of time interacting in peer groups. It identifies that the existence of peers is tremendously important for adolescents. Data in Serang District shows that adolescents aged 12-18 years, 16% received information about sex from friends, 35% from pornographic films, and only 5% from parents (Dinas Kesehatan Provinsi Banten, 2011). Hence, in their development period, adolescents require an adaptive social environment so that they are able to create comfortable conditions for asking questions and forming a responsible character for themselves. Adolescents are

also physically and psychologically vulnerable to the transmission of HIV/AIDS. Thus, adolescents are the focus of the population of this disease prevention program. Baros Village, Serang is in the area of the Banten Provincial Health Office where Banten Province is a province with HIV/AIDS cases with low knowledge of HIV/AIDS prevention in Indonesia (Kementerian Kesehatan Republik Indonesia., 2018). Therefore, it is important to know "The influence of perceptions of social support and family health tasks on HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten." Hence, the right health program strategy is implemented in the area.

## 2. RESEARCH METHOD

This research is a quantitative study, employing a descriptive analytic design with a cross-sectional research method. The population in this study were all adolescent age groups who attended SMAN 1 Baros Serang and SMK/SMA Attaufiqiyah and were in Baros Village, Serang, Banten. Sampling from each class administering stratified sampling method. After calculating the number of samples obtained as many as 345 teenagers to anticipate dropouts, the researchers added as much as 10% of the total sample so that the total became 380 samples.

This study employed univariate analysis to find the demographic values of the respondents (frequency distribution of age, gender, parental education, parental occupation, family income level, living in the same house, and ethnicity). Furthermore, univariate analysis is also utilized to identify the value of family structure, social culture, perceptions of social support, and family health tasks. Bivariate analysis used was the Chi-Square Test Formula to determine whether there was a relationship between age, gender, parental education, parental occupation, family income level, living in the same house, ethnicity, social culture, perception of social support, family structure, function and family health tasks. Multivariate analysis was performed employing the logistic regression test formula to identify the most influential factors on HIV/AIDS prevention behavior. This research has passed the ethical test from the UPNV Health Research Ethics Committee Number 2672/VII/2020/KEPK.

## 3. RESULTS AND DISCUSSION

**Table 1.** Demographic Frequency Distribution in Baros Village, Serang, Banten.

Variable	Frequency	Percentage (%)
<b>Age</b>		
Middle Ages (14-16 years)	267	77,4
Late Adolescence (17-20 years)	78	22,6
<b>Gender</b>		
Woman	197	57,1
Man	148	42,9
<b>Father's Education</b>		
Low Education (No School/Not Finished Elementary/SD/SMP)	300	87
Higher Education (SMA/Diploma/Bachelor/Postgraduate)	45	13
<b>Mother's Education</b>		
Low Education (No School/Not Finished Elementary/SD/SMP)	318	92,2
Higher Education (SMA/Diploma/Bachelor/Postgraduate)	27	7,8

<b>Father's occupation</b>		
Civil servant	6	1,7
Non civil servant	339	98,3
<b>Mother's Job</b>		
Civil Servant	2	0,6
Non Civil Servant	343	99,4
<b>Ethnic group</b>		
Java	10	2,9
Sunda	110	31,9
Betawi	2	0,6
Other	223	64,6
<b>Family Income</b>		
Less (< Rp. 3,872,551.00)	323	93,6
More (> IDR 3,872,551.00)	22	6,4
<b>Family Structure</b>		
Nuclear family (father-mother-child)	298	86,4
Single parent (lives only with father/mother)	6	1,7
Family of three generations	20	5,8
Extended family	21	6,1

Table 1 above shows that more than half of the teenagers in Baros Village, Serang, Banten in 2020 were the middle group of 267 people (77.44%), while the late teens group was 78 people (22.6%). In conclusion, most of the teenagers in Baros Village, Serang, Banten are middle teens (14-16 years). More than half of adolescents in Baros Village, Serang, Banten in 2020 were female, which were 197 people (57.1%), while adolescents with male sex were 148 people (42.9%). The majority of fathers and mothers have low education (no school/did not finish elementary/elementary/junior high school). The work of the father and mother are mostly non civil servants. Based on ethnicity among adolescents in Baros Village, Serang are mostly ethnic groups other than Javanese, Sundanese, Betawi. Most of the family income is less than the UMK (Minimum Wage), which is Rp. 3,872,551.00. Most teenagers live with their father and mother, which are included in the nuclear family structure.

**Table 2.** Frequency Distribution Based on Perceived Social Support, Family Health Tasks, and HIV/AIDS Prevention Behavior in Adolescents in Baros Village, Serang, Banten.

Variable	Frequency	Percentage (%)
<b>Perception of Social Support</b>		
Negative Perception of Social Support	167	48,4
Positive Perception of Social Support	178	51,6
<b>Families Recognize HIV/AIDS Problems</b>		
Unable to recognize the problem	141	40,9
Able to recognize problems	204	59,1
<b>Family Makes Decision</b>		
Unable to make a decision	167	48,4
Able to make decisions	178	51,6

<b>Family Caring for Sick Family Members</b>		
Unable to care for sick family members	181	52,5
Able to care for sick family members	164	47,5
<b>Family Modifies Environment</b>		
Unable to modify the environment	153	44,3
Able to modify the environment	192	55,7
<b>Families Use Health Services</b>		
Unable to take advantage of health services	216	62,6
Able to take advantage of health services	129	37,4
<b>Implementation of Family Health Tasks</b>		
Unable to conduct family health duties	184	53,3
Able to perform family health tasks	161	46,7
<b>HIV/AIDS Prevention Behavior</b>		
Good Behavior	255	73,9
Bad Behavior	90	26,1

In table 2, as many as 48.4%, which were 167 people had negative perceptions and 51.6%, which were 178 people possessed positive perceptions. Family health assignments based on the ability of families to recognize problems showed that most of the adolescents, who were 204 families (59.1%) of adolescents in Baros Village, Serang, Banten were able to recognize problems. Family health tasks based on the ability of families to make decisions show the results of most families as many as 178 families (51.6%). There were teenagers in Baros Village, Serang, Banten able to make decisions for their teenagers. Regarding the task of family health in caring for sick members, the results presented that 181 families (52.5%) of adolescents in Baros Village, Serang, Banten were unable to care for sick family members.

The task of family health related to the ability of families to modify the environment that as many as 153 (55.7%) families of adolescents in Baros Village, Serang, Banten were able to modify an appropriate environment for their adolescent children so that they were able to perform HIV/AIDS prevention behavior. Although overall, the implementation of family health tasks is still a lot, a number of 184 families (53.3%) are unable to perform family health tasks. The description of HIV/AIDS prevention behavior in the table above, as many as 73.9%, which were 255 people, most of whom are teenagers who show good behavior.

**Table 3.** Analysis of Demographic Relationships with HIV/AIDS Prevention Behavior in Adolescents in Baros Village, Serang, Banten.

Variable	HIV/AIDS Prevention Behavior			p-value	OR
	Good Behavior		Bad Behavior		
	n	%	n	%	
<b>Age</b>					
Middle Ages (14-16 years)	202	76	65	24	267 77,4
					1,466 0,224 (0,844-2,545)

Late Adolescence (17-20 years)	53	68	25	32	78	22,6		
<b>Gender</b>								
Woman	155	78,7	42	21,3	197	57,1	0,028	1,771
Man	100	67,6	48	32,4	148	42,9		(1,091- 2,876)
<b>Father's education</b>								
Low education (No school/Not finished elementary school/elementary/ junior high school)	219	73	81	27	300	87	0,415	0,676 (0,312- 1,465)
Higher Education (SMA/Diploma/Bac helor/Postgraduate)	36	80	9	20	45	13		
<b>Mother's Education</b>								
Low education (Not in school/Not graduated from SD/SD/SMP)	234	73,6	84	26,4	318	92,2	0,804	0,796 (0,311- 2,039)
Higher Education (SMA/Diploma/Bac helor/Postgraduate)	21	77,8	6	22,2	27	7,8		
<b>Ethnic group</b>								
Java	5	50	5	50	10	2,9	0,222	-
Sunda	85	77,3	25	22,7	110	31,9		
Betawi	2	100	0	0	2	0,6		
Other	164	73,1	60	26,9	223	64,6		
<b>Family income</b>								
Less (< Rp. 3,872,551.00)	238	73,7	85	26,3	323	93,6	0,904	0,824 (0,295- 2,01)
More ( $\geq$ Rp. 3,872,551.00)	17	77,3	5	22,7	22	6,4		
<b>Family Structure</b>								
Nuclear Family (Father-Mother- Child)	220	73,8	78	26,2	298	100		
Single Parent (Lives Only With Father/Mother)	5	83,3	1	16,7	6	100		
Family of 3 generations (Three generation)	15	75	5	25	20	100	0,949	-
Extended family	15	71,4	6	26,6	21	100		

Table 3 shows that there is no significant relationship between age and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. However, there is a significant relationship between gender and HIV/AIDS prevention behavior in

adolescents in Baros Village, Serang, Banten. However, in the table, it is displayed that there is no significant relationship between father and mother's education with HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. There is no significant relationship between father and mother's work with HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. There is no relationship between ethnicity and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. There is no relationship between family income and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten, and there is no relationship between family structure and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten.

**Table 4.** Analysis of the Relationship between Perceptions of Social Support and Family Health Tasks with HIV/AIDS Prevention Behavior in Adolescents in Baros Village, Serang, Banten.

Variable	HIV/AIDS Prevention Behavior						p-value	OR		
	Good Behavior		Bad Behavior		Total					
	n	%	n	%	N	%				
<b>Perception of Social Support</b>										
Negative Perception of Social Support	123	73,7	44	26,3	167	100		0,974 (0,602)		
Positive Perception of Social Support	132	74,2	46	25,8	178	100	1,000	- 1,576)		
<b>Family Health Tasks Recognize Problems</b>										
Not capable	94	66,7	47	33,3	141	100	0,015	0,534		
Capable	161	78,9	43	21,1	204	100		- 0,868)		
<b>Family Health Tasks make decisions</b>										
Not capable	121	72,5	46	27,5	167	100		0,864		
Capable	134	75,3	44	24,7	178	100	0,635	- 1,397)		
<b>Family Health Tasks Caring for Sick Family Members</b>										
Not capable	134	74	47	26	181	100		1,013		
Capable	121	73,8	43	26,2	164	100	1,000	- 1,639)		
<b>Family Health Tasks Modifying the Environment</b>										
Not capable	108	70,6	45	29,4	153	100		0,735		
Capable	147	76,6	45	23,4	192	100	0,258	- 1,190)		
<b>Family Health Tasks Utilizing Health Services</b>										
Not capable	154	71,3	62	28,7	216	100		0,689		
Capable	101	78,3	28	21,7	129	100	0,192	- 1,149)		

<b>Implementation of Family Health Tasks</b>						
Unable to carry out	130	70,7	54	29,3	184	100
Able to carry out	125	77,6	36	22,4	161	100

0,176

(0,426)

-

1,129)

Based on table 4, there is no significant relationship between perceived social support and HIV/AIDS-AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. Likewise, presented in the table, there is no significant relationship between family health tasks and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten.

**Table 5.** Feasibility Analysis of Independent Variables for Multivariate Test Model.

<b>Sub Variable</b>	<b>p-value</b>
Family ability to recognize problems	0,015
Family decision-making ability	0,902
Ability of the family to care for sick family members	0,537
Family's ability to modify the environment	0,303
Ability of families to use health facilities	0,395
Implementation of Family Health Tasks	0,139
Perception of social support	0,873
Age	0,360
Gender	0,024
Father's education	0,711
Mother's education	0,798
Father's occupation	0,859
Mother's work	0,999
Family income	0,940
Ethnic group	0,737
Family structure	0,993

Multivariate analysis was performed on independent variables including: age, gender, parental education (father and mother), parental occupation (father and mother), ethnicity, family income, family structure, perception of social support, family health tasks (family ability to recognize problems, the ability of the family to make the right decisions, the ability of the family to care for sick members, the ability of the family to modify a healthy environment, and the ability of the family to utilize health services) and the implementation of family health tasks with the dependent variable being HIV/AIDS prevention behavior. The analysis was conducted in this study through 9 steps in selecting independent variables that deserve to be included in the multivariate test model as presented in table 24 above. The feasible variable has a significance level (sig.) or p-value < 0.25 with the "Enter" method in simple logistic regression modeling. The process occurs through one-by-one simple regression analysis stages between each independent variable to the dependent variable. If the results of the table are "variables in the equation" and see the value "sig.". If the significant value is <0.25, the variable is eligible to enter the multivariate model. Based on the results of the selection of variables above, the variables which deserve to be included in the multivariate test are the family health task variable in the ability to recognize problems, perform family health tasks, and gender because it has a p-value <0.25.

**Table 6.** The Most Influential Factors on HIV/AIDS Prevention Behavior in Adolescents in Baros Village, Serang, Banten.

Variable	B	Wald	p-value	OR	(95% CI)
Families know the problem	0,682	7,344	0,007	1,978	1,208-3,239
Implementation of family health tasks	-0,366	2,164	0,141	1	0,426-1,129
Gender	-0,631	6,292	0,012	0,532	0,325-0,871

Logistic regression analysis went through several stages, in table 5 above which is the result of a multivariate test after the 9th stage, the results obtained from all independent variables suspected of influencing HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten that there is one sub variable (task family health in the ability to recognize problems) which is most related to HIV/AIDS prevention behavior with p-value  $0.007 < 0.05$ . The largest OR value obtained is 1.978, meaning that families who are unable to recognize the problem are at risk of 1.978 times for the occurrence of poor HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten.

The results of the data distribution display that half of the students of SMA/SMK Attaufiqiyyah, Baros Village, Serang, Banten is the middle age group, which is 77.4%. The sample in this study consisted of high school students in grades 1-3, with an average of students entering their middle and late teens. More than half of the research sample was in the middle age group, in which the middle teens were in grades 1 and 2 of high school. Late teens are less than middle teens because late teens are dominated by 2nd and 3rd grade students. A teenager at the stage of middle adolescence has a character who needs friends, very happy if he has many friends. Furthermore, teenagers begin to like themselves and tend to find friends who have the same nature as them. Adolescents in the late adolescence stage can be implied to have egos that seek opportunities to unite with others and in new experiences.

Gender distribution shows that more than half of the students are female with a percentage of 57.1%. The numbers are not much different. It is because according to the researcher, the number of samples in the sampling who are male and female are almost the same. There is no dominant gender in obtaining the right to education in the school. All genders, both male and female, have the same right to education. Gender inequality occurs when there are different judgments between men and women in a community which causes men and women to get different treatment. It causes inaccuracy in the treatment of adolescents and low ability to access health services.

The distribution of education of fathers and mothers is mostly low education (no school/did not finish elementary/elementary/junior high school) amounting to 87% of fathers and 92.2% of mothers. Educational factors determine whether or not someone easily absorbs knowledge. The level of education can affect a person's health behavior including the ability to prevent HIV/AIDS (Notoatmodjo, 2010; Soetjiningsih, 2010). The condition of a high educational background allows parents to more easily receive all information from outside, especially about good family care, how to maintain their children's health, education and others (Handono & Bashori, 2013).

The distribution of family income levels is less than Rp. 3,872,551.00 as many as 93.6% have family incomes less than the UMK. Low-income levels affect parents' access to increase knowledge in HIV/AIDS prevention. Soekanto, (2012) mentioned that a person's occupation and education also affect the socioeconomic status of the family. In society, there are several layers of society including the lower, middle, and upper social layers. Each layer of society is certainly different, one of which is influenced by the socioeconomic status of a family. Family income will affect the quality of life of family members. Family income is an important aspect for the family

and affects family life. Maulina, et al., (2014) suggested that families who have sufficient income can change the health status of the family. It means that families with sufficient income will be better able to facilitate family members in improving family health, in this case increasing knowledge in HIV/AIDS prevention.

The distribution of adolescent ethnicity is mostly ethnically other than Javanese, Sundanese, and Betawi, (64.6%). Tribe is part of culture. The level of knowledge is influenced by culture, which includes ideas that exist in the human mind and are implemented in everyday life. Each tribe has different customs and norms. The perspective and mindset of a person in behaving towards health is influenced by ethnicity and culture. Culture is a complex whole consisting of knowledge, beliefs, arts, morals, customs, and abilities acquired by a person as a member of society (Isnati, 2012).

Family is tremendously influential for every individual. The family environment is where a person experiences a process of growth and development. Family structure relates to family support for individuals in performing health behaviors. Family support is also associated with a person's quality of life. Relationships between family members have a profoundly strong influence on family members, both physically and psychologically. Undaru, et al., (2015) emphasized that family emotional support can increase the positive impact and reduce the negative impact to improve the quality of life in healthy behavior.

The results of the research on the perception of social support were 48.4%, which were 167 people who had negative perceptions and 51.6%, which were 178 people who had positive perceptions. The perception of social support for adolescents in Baros Village, Serang, Banten can be identified in the results of the study that more or less have a positive perception. This result is in accordance with research of Sari, (2018) which revealed that the difference between negative and positive perceptions is very small. It is because there are 6 components that form perceptions, comprising of: adolescent beliefs that HIV/AIDS is the result of certain behaviors, adolescents' beliefs about the severity of HIV/AIDS, beliefs about recommended methods of preventing HIV/AIDS, beliefs about the cost of HIV prevention behavior, beliefs about the value of HIV/AIDS prevention behavior, support or encouragement from the surrounding environment in taking actions related to HIV/AIDS prevention behavior, and adolescents' self-confidence in HIV/AIDS prevention behavior (Glanz et al., 2008; Priyoto, 2014).

Likewise, it is emphasized from the theory that the perception of social support is a person's ability to organize and interpret the stimulus he obtains from the environment (Marzuki, 2017). Therefore, Zahra, (2017) stated that the environment which supports the formation of adolescent perceptions is parents, friends and people who are involved in providing and forming a sense of comfort, being loved and appreciated. However, regarding the five components of family health tasks that shape the implementation of family abilities in shaping adolescent behavior, particularly for HIV/AIDS prevention when viewed comprehensively and complexly, it can be stated that there are still more who are unable to conduct family health tasks for adolescents in Baros Village, Serang, Banten.

The developmental conditions that adolescents go through make their behavior tends to be at risk of adopting the behavior of others. Adolescent behavior can be assertive if it can fulfill its developmental tasks. If adolescents do not fulfill their developmental tasks, there will be role conflict which results in adolescents having a weakness in personality so that they are easy to adopt negative behavior (Priasmoro, et

al., 2016). Likewise, Dewi, (2012) stated that adolescents will go through a stage of egocentrism which is strongly influenced by their social environment, especially peers, family, and teachers.

The results of the bivariate analysis presented that there was no significant relationship between age and HIV/AIDS prevention sexual behavior, nor was there a significant relationship between gender and HIV/AIDS prevention sexual behavior. It is not in accordance with the research result of Martilova, (2020) which discovered that there is a significant relationship between adolescent age and adolescent knowledge in HIV/AIDS prevention. A person's knowledge is influenced by age, increasing a person's age affects his physical and psychological changes. In this study, there was no relationship between age and HIV/AIDS prevention behavior because there were no differences in the values conducted for the existence of a male and female adolescent, so that the treatment was the same for boys and girls.

Mubarok, (2011) argued that adolescents aged more than 17 years have better knowledge than adolescents aged less than 17 years. Middle age adolescents do not necessarily have good or bad behavior in HIV/AIDS prevention, as well as late teens do not necessarily have good or bad behavior in HIV/AIDS prevention. Adolescence is related to the socialization of adolescents with peers which allows them to imitate the behavior of their peers.

The results unveiled that there was a significant relationship between gender and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. It is not in accordance with the research of Widyoningsih & Sutarno, (2017) that gender has no effect on a person's behavior in preventing free sex. Furthermore, there are several things that influence attitudes including personal experience, culture, mass media, important people in their lives, religion, and one's emotions. These are influenced by anxiety factors. Demak, & Suherman, (2016) emphasized that women have a higher level of anxiety due to excessive autonomic nervous reactions with an increase in the sympathetic system, an increase in norepinephrine, an increase in the release of catecholamines and an abnormal serotonergic regulation disorder. It is in accordance with the results of this study that women have the opportunity greater in HIV/AIDS prevention than men.

The results presented that there was no significant relationship between father's education and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. Parents with high education do not necessarily have children with good behavior in preventing HIV/AIDS, and vice versa parents with low education can also have children with good behavior in preventing HIV/AIDS. The condition of a high educational background allows parents to more easily receive all information from outside, especially about good family care, how to maintain their children's health, education and so on (Handono, 2013). Higher education background causes a person to be exposed to the life of modern society so that the individual will easily accept the development of science and modern health care. Therefore, Kasih, (2016) stated that the attitude of adolescents in preventing HIV/AIDS transmission will increase if there is sufficient knowledge in education in the family.

Stanhope, & Lancaster, (2015) asserted that one of the environmental risk factors that contribute to vulnerability in a population is socioeconomic status. The condition of poverty or low income is the main cause of family vulnerability to health problems. One's perception will affect one's actions in conducting prevention efforts. Moreover, Iqbal, et al., (2019) explained that people living in urban areas have a secondary level of education and have high knowledge of AIDS. It is also influenced by adolescent peers which is enforced in the results of the research by Rini & Noviyani, (2019) which states

that the influence of peers is tremendously significant in preventing bad behavior, including the prevention of HIV/AIDS behavior.

The results display that there was no significant relationship between ethnicity and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. Differences in cultural shifts at this time when an individual does not purely behave in accordance with the cultural norms that exist in his tribe. It is contrary to the opinion of Isniati, (2012) that the cultural perspective of health problems is influenced by changes in relations with the community that have an impact on health behavior. In the current era of 4.0, it is possible that social media access to communication is quite strong. Teenagers can access information around the world from various mass media today. It allows teenagers to no longer behave and behave according to the norms and culture of the teenager. In the current era, there is a cultural shift which allows the influence of the mass media at this time to grow stronger than ever before.

The results demonstrated that there was no significant relationship between family income and HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. Family income is influenced by the work in the family. Family income is influenced by the work in the family. The results of this study are not in accordance with the results of research by Da Costa, et al.,(2014) which illustrates that family income is related to a person's quality of life in the implementation of health behavior. Low family income does not necessarily have bad behavior in HIV/AIDS prevention, as well as high family income does not necessarily have good behavior in HIV/AIDS prevention. It is influenced by several things, including access to social media in the 4.0 era, which can be accessed by teenagers with various conveniences without incurring large costs.

The results showed that there was no significant relationship between perceived social support and HIV/AIDS AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. Romdiyah, (2017) declared that there is a relationship between family support and the behavior of preventing HIV/AIDS transmission. Romdiyah, (2017) specified that support from family members as seen from the family structure makes adolescents more motivated in preventing HIV/AIDS transmission behavior and will decrease their motivation if they do not get support from their families. Family support is required so that it can reduce the risk of HIV/AIDS behavior. The family support demanded for teenagers today is different from before because teenagers are looking for freedom in exploring themselves so that their attachment to their family will be reduced. It is confirmed in the research of Adita, et. al., (2017) which explained that family support is very important in the prevention of HIV/AIDS. Families with adolescents need to adapt in performing family development tasks so that there is no confusion which can lead to the fragility of adolescents' personalities (Priasmoro, et. al., 2016).

It is not in line with research by Sari, (2018) which shows that there is a significant relationship between perception and behavior to prevent HIV/AIDS transmission in Madiun City. Based on research from Rini, & Noviyani, (2019), it is presented that the results above do not match, there is an influence between perception and adolescent health behavior. A person's behavior is determined by the perception of the seriousness of the HIV/AIDS problem. Thus, the source of information has a positive effect on positive perceptions and will shape good HIV/AIDS prevention behavior. However, it should be noted that sources of information come not only from individuals but also parents, peers, health workers, and school teachers (Apollo, & Cahyadi, 2012; Rini, & Noviyani, 2019). Furthermore, perception is formed from

various sources of information obtained by a person so that it is processed and interpreted to provide direction in healthy behavior (Notoatmodjo, 2012).

The results of this study are in accordance with what was stated by Wahyuningtias, (2019) that there is no family functioning with risky sexual behavior in adolescents. The study revealed that family functions are very diverse and not all are related to risky sexual behavior in adolescents. According to Friedman, et al., (2010), the function of the family in shaping the behavior of family members is more emphasized on the function of family health care, which is the ability of the family to perform health tasks to fulfill the task of growing and developing family members as well as adolescents. It is also perceived from the North American Nursing Diagnosis Association (NANDA) that the role of nurses is very necessary in providing education about risky diseases obtained from sexual intercourse, sexual behavior, about self-respect, belief in religious beliefs, and other counseling guidance to adolescents.

In multivariate analysis, the largest OR value obtained is 1,978, meaning that families who are unable to recognize the problem are at risk of 1,978 times for the occurrence of poor HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. Sulistyowati, (2012) mentioned the cause of the family not being optimal in completing family health tasks due to the low level of family ability in recognizing problems. Therefore, the ability of families to recognize problems is the main basis that determines the implementation of family health tasks. Families who are unable to recognize health problems that occur in family members will find it difficult to prevent health problems and perform health care for family members.

#### 4. CONCLUSION

The conclusion of this study is that there is a relationship between gender and family health tasks in recognizing problems with HIV/AIDS prevention behavior in adolescents in Baros Village, Serang, Banten. The factor which primarily influences the behavior of preventing HIV/AIDS is the task of family health in the ability to recognize problems. Researchers hope that adolescents will further enhance their socialization with friends, family, and teachers as well as with people in their environment so that they are able to select and perform positive activities so that they have good perceptions and support in behavior, particularly in the prevention of HIV/AIDS. Moreover, families should pay more attention at home, communicate, and interact with adolescents in order to be able to provide information so that it increases not only knowledge but attitudes and behavior in HIV/AIDS prevention. For community nurses, in particular, conduct health education about HIV/AIDS prevention behavior on a continuous and sustainable basis, not only for adolescents but also for their families and peers as a support system.

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