The Relationship of Knowledge Level and Adolescents About Reproductive Health with Adolescent Reproductive Health Behavior

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Abstract

Adolescence is a dynamic developmental phase in an individual’s life. This period is the transition from childhood to adulthood. During this period, there was rapid growth, including reproductive function, which affected the development of changes in physical, mental and social roles. Adolescence is also often called a critical period, because at that time when teenagers do not get the right guidance and information, problems often occur that can affect the future of adolescents. The purpose of the study was to determine the relationship between the level of knowledge and attitudes of adolescents about reproductive health with reproductive health behavior of adolescents in grades 11 and 12 at SMA Negeri 4 Medan. In this study using a cross sectional research design, the research subjects were 11th and 12th grade students of SMA Negeri 4 Medan. The variables studied were the level of knowledge and attitudes of students. Data analysis using a quantitative approach was used to determine the distribution of the data, using univariable analysis, bivariable with Chi-square. The results of the bivariable statistical test showed that there was a significant relationship between the level of knowledge and adolescent reproductive health behavior (χ²=18.2; p=0.00, RP=1.585; CI 95%=1.19-2.09), and there is a significant relationship between adolescent attitudes and reproductive health behavior (χ²=18.00; p=0.00, RP=1.570; 95% CI=1.19-2.09). knowledge and attitudes of adolescents, with adolescent reproductive health behavior at SMA Negeri 4 Medan.

Introduction

Adolescence is a dynamic developmental phase in an individual’s life. This period is the transition from childhood to adulthood. During this period, there was rapid growth, including reproductive function, which affected the development of changes in physical, mental and social roles. Adolescence is also often called a critical period, because at that time when adolescents do not get the right guidance and information, problems often occur that can affect the future of adolescents (Tafal, 2003).

According to Gunarsa (2010) in this period there are changes that occur during adolescence, one of which is causing changes in social relationships. Adolescents who were previously members of the family in the cradle of parental affection and other members are now starting to transfer their sense of attachment to people outside the family environment. Teenagers begin to form intimate friendships with friends. Intimate friendships can span a longer period of time than previous friendships. With the emergence of the sex drive as a result of sexual maturity, intimate friendships are formed between young boys and girls. If intimate friendship leads to courtship, monkey love, it is necessary to increase vigilance.

Based on Indonesia’s 2019 health profile data, the total population of Indonesia reached 268,074,565 people. Where the number of teenagers in Indonesia aged 15-19 years is quite large, namely < 30.1 million people, aged 20-24 years 28.7 million people or almost 25% of the total population of Indonesia.

According to SDKI data (2017) the problems that are often carried out by adolescents are premarital sexual relations: 8% boys & 2% girls, most started at the age of 17 years, condom use: 49% girls & 27% boys, pregnant unwanted: 16% of girls aged 15-19 years, and 8% of those aged 20-24 years, abortion: 23% of girls & 19% of boys know if their friend had an abortion and 1% of those accompanying her during the process 45% of girls and 44% of boys started dating at the age of 15-17 years.
15% of boys and 1% aged 15-24 years have consumed alcohol 5% of men and <1% of women used illegal drugs.

Sarwono (2011) states that adolescence is a transitional period, where adolescents seem to stand on two poles, namely the old pole (childhood) that will be left behind and the new pole (adulthood), which is the period to be entered. The transition period makes adolescents experience doubts because on the one hand they are not ready to enter a new world, but on the other hand they have to leave the old period. As a result, it will cause difficulties in adolescents and will appear unbalanced conditions in them. This unbalanced condition in some teenagers will be shown by an aggressive, quiet or even naughty attitude. The transition period may lead to a period of crisis, which is marked by a tendency for deviant behavior to emerge.

Therefore, researchers are interested in conducting research on the relationship between the level of knowledge and attitudes about reproductive health on adolescent reproductive health behavior

Adolescence is a transitional period between childhood and adulthood, where a growth spurt occurs, secondary sex characteristics arise, fertility is achieved, and psychological and cognitive changes occur. Adolescence is a transitional period marked by physical, emotional and psychological changes. Adolescence, which is between the ages of 10-19 years, is a period of maturation of the human reproductive organs and is often called puberty (Priyanti, 2017).

Adolescent reproductive health is a healthy condition related to the reproductive system, function and process possessed by adolescents. The objective of the adolescent reproductive health program is explicitly stated to increase the understanding, knowledge, attitudes and positive behavior of adolescents about reproductive health and rights, in order to improve their reproductive health and prepare family life in supporting efforts to improve the quality of future generations. The legal basis used as the basis for the development of KRR, among others, is Law no. 4 of 1979 concerning Child Welfare and Law no. 10 of 1992 concerning Population Development and Prosperous Families. The main target of the KRR program is the group of teenagers aged 10-19 years either in the school environment or outside of school (Atikah, 2017)

METHOD

Research Type and Design
This type of research uses a cross sectional design. Cross sectional research design is a research method with a cross sectional approach (cross-sectional), namely a research design by measuring or observing at the same time or at one time (Hidayat, 2007). Using a quantitative approach. A quantitative approach is used to determine the distribution of the data.

Population and Research Sample
The location of this research is the city of Medan. The reasons for choosing it as the research location is SMA Negeri 4 Medan

The population is 11th and 12th grade students of SMA Negeri 4 Medan. This criterion was chosen on the grounds that high school students aged 16-18 years are a vulnerable group and urgently need information on reproductive health.

The sample is 11th and 12th grade students of SMA Negeri 4 Medan which was taken randomly. Where everyone in all target populations has the right to an equal opportunity to vote. This sample will be chosen randomly so that the representation of the results is not biased from the total population of 92 people.

Processing and data analysis
Data processing using a computer, which is carried out through a process with the following stages (Sugiono, 2008): 1) Editing 2) Scoring 3) Coding 4) Data Entry 5) Tabulation. Researchers conducted univariate analysis. Descriptive analysis was carried out with the aim of describing each variable studied separately by making a frequency table of each variable. And do a bivariate analysis that is looking at the relationship between the independent variable and the dependent variable by using the chi square statistical test ($x^2$) <0.05 and 95% confidence level.

RESULTS AND DISCUSSION

The location used in this study is SMA Negeri 4 with the consideration this research can be carried out because of the cooperation of the Diknas and Dinkes. This is a UKS (School Health Business) activity program which is carried out 2 times in 1 month.

Table 1 shows that the majority of adolescents aged 18 years are 56 people (64.13%) minorities aged 19 years amounted to 7 people (7.60%), with the majority gender being 49 people (53.26%) and a female minority as many as 43 people (46.26%). When viewed from the place of residence, the majority live with biological parents as many as 67 people (72.82%) and the minority live with guardians/boarding houses as many as 25 people (27.17%)

Table 2 shows that the majority of teenagers with good knowledge are 50 people (54.34%), and a minority of teenagers with sufficient knowledge are 28 people (30.45%), and teenagers with less knowledge are 14 people (15.21%), the majority of adolescents are supportive as many as 48 people (54.17%), and the minority of adolescents who do not support as many as 44 people (47.82%)
Bivariate analysis was used to see the relationship between the independent variables Level of knowledge and attitudes with the dependent variable of adolescent reproductive health behavior. The statistical test used was chi-square with p value <0.05 indicating a statistically significant relationship. The RP value (prevalence risk) equal to 1 is interpreted as a variable suspected of being a risk factor that is not related to adolescent reproductive health behavior.

| Variables     | Behavior | X²¹ | P   | RP   | CI        |
|---------------|----------|-----|-----|------|-----------|
|               | Good     | N   | %   | Bad  | N        | %       |
| Knowledge     |          |     |     |      |          |         |
| Well          |          | 27  | 54  | 23   | 46       |         |
| Enough        |          | 15  | 53.57 | 13 | 46.42   | 18.2 | 0.00 | 1.585 | 1.19-2.09 |
| Not enough    |          | 9   | 64.28 | 5  | 35.71   |         |
| Attitude      |          |     |     |      |          |         |
| Support       |          | 30  | 62.5 | 18  | 37.5    | 18.00 | 0.00 | 1.570 | 1.19-2.09 |
| Not Support   |          | 20  | 45.5 | 24  | 54.5    |         |

Table 3 shows (χ²=18.2; p=0.00) that there is a significant relationship between the level of knowledge of adolescents on adolescent behavior on adolescent reproductive health with a value (RP=1.585; 95% CI=1.19-2.09), good will behave well 1.5 times.

The results of the chi square test for variable attitude and adolescent reproductive health behavior (χ² = 18.00; p = 0.00), this means that there is a significant relationship between adolescent attitudes towards adolescent reproductive health behavior with a value (RP = 1.570; 95% CI = 1.19-2.09) meaning that adolescents who have Supporting reproductive health will behave well towards adolescent reproductive health 1.6 times compared to adolescents who have a non-supportive attitude towards adolescent reproductive health.

**Discussion**

From the results of the analysis that has been carried out the relationship between the level of knowledge and attitudes of adolescents towards adolescent reproductive health behavior, the significance of the relationship between the independent variable and the dependent variable at SMA Negeri 4 Medan.

**Characteristics of adolescents**

High school is one of the levels of education that students take after graduating from junior high school. According to the age limit of the Ministry of Health of the Republic of Indonesia, adolescents are divided into 2, namely early adolescence (12-16) and late adolescence (17-25). Meanwhile, Sebayang, et al in their book entitled "Adolescent Sexual Behavior" describes the classification of adolescents based on age and their characteristics as follows: early adolescence (10-12 years), middle adolescence (13-16 years), late adolescence (17-21 years), year (Anindya, 2019)

Overall the majority of adolescents in this study showed that the majority of adolescents aged 18 years were 56 people (64.13%). Biologically, physical changes marked by the onset of puberty and the cessation of physical growth; cognitively, as a change in the ability to think abstractly or socially, as a period of preparation for becoming an adult. Major pubertal and biological changes include changes in sex organs, height, weight, and muscle mass, as well as major changes in brain structure. Cognitive advancement includes increasing knowledge and the ability to think abstractly and reason more effectively.

Adolescence is a dynamic developmental phase in an individual's life. This period is the transition from childhood to adulthood. During this period, there was rapid growth, including reproductive function, which affected the development of changes in physical, mental and social roles. Adolescence is also often called a critical period, because at that time when adolescents do not get the right guidance and information, problems often occur that can affect the future of adolescents (Tafal, 2003).

Furthermore, Sarwono (2011) states that adolescence is a period of transition, where adolescents seem to be based on two poles, namely the old pole (childhood) that will be left behind and the new pole (adulthood), namely the period to be entered. The transition period makes adolescents experience doubts because on the one hand they are not ready to enter a new world, but on the other hand they have to leave the old period. As a result, it will cause difficulties in adolescents and will appear unbalanced conditions in them. This unbalanced condition in some teenagers will be shown by an aggressive, quiet or even naughty attitude. The transition period may lead to a period of crisis, which is marked by a tendency for deviant behavior to emerge.

The relationship between adolescent knowledge and adolescent reproductive health behavior.

Knowledge is a result of curiosity through sensory processes, especially in the eyes and ears of certain objects. Knowledge is an important domain in the formation of open behavior or open behavior (Donsu, 2017). Knowledge or knowledge is the result of human sensing or the result of someone knowing about an object through their five senses. The five human senses for sensing objects are sight, hearing, smell, taste and touch. At the time of sensing to produce knowledge is influenced by the intensity of attention and perception of the object. A person's knowledge is mostly obtained through the sense of hearing and the sense of sight (Notoatmodjo, 2014).

Knowledge according to the Big Indonesian Dictionary (KBBI) is everything that is known, which is related to a person's intelligence. Knowledge is everything that is known based on the experience gained by every human being (Mubarak, 2011).

According to WHO (1992) knowledge is the basis for the formation of one’s actions. Knowledge can be obtained from education, self-experience and the experience of others, mass media, and the environment. A person's knowledge of an object can change and develop according to his abilities, needs, experience and the high and low mobility of
information material about the object in his environment. The importance of adolescents knowing adolescent reproductive health so that they have correct information about the reproductive process and various factors that exist around adolescents.

The results of the analysis of variables between the level of knowledge of adolescents about adolescent reproductive health and adolescent reproductive health behavior showed \( \chi^2 = 18.2; p = 0.00 \) there was a significant relationship between the level of knowledge of adolescents on adolescent behavior on adolescent reproductive health and the value \( \chi^2 = 1.585; CI 95 \% = 1.19-2.09 \) This means that teenagers who have good knowledge will behave well 1.5 times.

This is similar to the research conducted by Andika (2020) which found the results, the level of knowledge in general showed that 52 respondents mostly had good knowledge as many as 28 respondents (63.8%) while adolescents who had sufficient knowledge were 24 respondents (46.2%) regarding adolescent reproductive health

**Relationship between adolescent attitudes and adolescent reproductive health behavior.**

Thurstone, Likert and Osgood (in Azwar, 2009) attitude is a form of evaluation or feeling reaction. A person’s attitude towards an object is a feeling of support or favor (favorable) and feelings of not supporting or not taking sides (unfavorable) on the object. Meanwhile, Secord and Backman (in Azwar, 2009), define attitude as a certain regularity in terms of feelings (affection), thoughts (cognition), and predisposition of one’s actions (conation) to an aspect of the surrounding environment.

Walgito (2003) states that attitude is an organization of opinions, a person’s beliefs about objects or situations that are relatively steady, accompanied by certain feelings, and provide the basis for the person to make a response or behave in a certain way he chooses. Zimbardo and Ebbesen (in Ahmadi, 1991) state that attitude is a predisposition to a person, idea or object that contains cognitive, affective and conative components, Thurstone (in Walgito, 2003) sees attitude only as a level of affection, not yet associated with behavior.

In accordance with their development period, adolescents have many dreams and desires that they want to realize in the future. This causes adolescents to have very high dreams, but the abilities possessed by adolescents are not sufficient so that adolescents are overwhelmed by feelings of anxiety.

According to WHO, attitude makes a person approach or move away from another person or object. A positive attitude towards health values is not really manifested in a real action. Then Neco Comb (Cit. Notoadmojo, 1993) attitude is not yet an action or activity but is an act of behavior.

The results of the chi square test \( \chi^2 = 18.00; p = 0.00 \) this can mean that there is a significant relationship between adolescent attitudes towards adolescent reproductive health behavior with a value \( \chi^2 = 1.570; 95\% CI = 1.19-2.09 \) meaning that adolescents who have Supporting reproductive health will behave well towards adolescent reproductive health 1.6 times compared to adolescents who have an unsupportive attitude towards adolescent reproductive health. When asked to respondents about adolescent attitudes about adolescent reproductive health, it was found that the majority of adolescents were supportive of adolescent reproductive health.

Research conducted by Rina (2010) with the results of attitudes about reproductive health is significantly related to adolescent reproductive health behavior in adolescent girls at SMK Muhamadiah I, Sragen Regency. These results are shown in \( p = 0.002 \) on the attitude variable and the results of the F test obtained that the calculated F value \( (29.917) \) is greater than F table \( (9.72) \) with a significance level of 0.000. Conclusion Based on the results of the statistical analysis, it was concluded that the more positive the attitudes of adolescents about reproductive health, the more positive adolescents’ attitudes towards reproductive health were

**CONCLUSIONS AND RECOMMENDATIONS**

Based on the results and discussions that have been described by the researchers, it can be concluded that there is a significant relationship between the level of knowledge and attitudes of adolescents about reproductive health with reproductive health behavior at SMU Negeri 4 Medan, namely from the results of univariable and bivariable analysis there is a statistically significant relationship between attitudes the level of adolescent knowledge about adolescent reproductive health with adolescent reproductive health behavior, adolescent attitudes about adolescent reproductive health on adolescent reproductive health behavior.

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**Conflict of Interest Statement**

The authors declare that there is no potential conflict of interest in connection with the writing and publication of this article

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