

Article

The Relationship between Adolescent Characteristics and The Level of Knowledge about Reproductive Health in RW 03 Tanah Tinggi Village of Johar Baru Sub-District

Ni Nyoman Sri Artina Dewi¹, Agustina Ida Pratiwi²
¹STIK Sint Carolus

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CORRESPONDENCE

Phone: 081809128381
E-mail: komang.artina@gmail.com

ABSTRACT

Some of the factors that influence adolescent reproductive health are, among others, knowledge, personality, attitude and environment. This study generally aimed to determine the relationship between adolescent characteristics and adolescent knowledge about reproductive health. This research was an analytical study with a cross-sectional study approach, using primary data obtained from a questionnaire, which was given to adolescents totaling 56 respondents aged 10-19 years. Data processing used the SPSS program 20. Data analysis in this study was univariate and bivariate analysis with Chi-Square statistical tests. The results showed that there was a relationship between age and adolescent knowledge about reproductive health with a p value of 0.009 ($p < 0.05$), there was no relationship between gender and adolescent knowledge with a p value of 0.103 ($p > 0.05$), and there was a relationship between sources of information and knowledge with a p value of 0.006 ($p < 0.05$). From the results of this study, the researchers suggested that adolescents should continue to improve their knowledge regarding reproductive health, either face-to-face or mass media.

I. INTRODUCTION

Mass health is a condition that ensures that functions and communication can take place in a physically, mentally and socially prosperous state and are not only free from disease or malfunctioning of the organs (Emilia O et al. 2019). Procedural health is not only related to the organ but also related to various aspects of health. However, the health of adolescents has received special attention because during adolescence there are various organ changes in the state of menstruation, wet dreams, and signs of secondary sex development.

In Setiowati's (2014) study, it is stated that there are several factors that affect adolescent health, i.e., the environment, including information from peers, readings, porn, internet access, etc. There are also other factors that affect adolescent health, i.e., knowledge, attitudes and personality. According to data held by the United Nations Population Division in 2007 in a study conducted by Suwarni and Selviana (2015), it is stated that the population of adolescents aged 10-19 years reaches 1.2 billion people or it can be said that almost 1 in 5 people in the world is teenagers aged 10 -19 years old. Judging from the data, it shows that the proportion of teenagers in the world is high, this has a good impact on a country because adolescents are an investment in the future. However, what happens is that it is estimated that 47% of adolescents in the world have become sexually active.

In Indonesia, it shows that 1 in 4 people is teenagers aged 10-24 years. This number is fairly large, i.e., 26.7% of the total population data based on the results of the 2010 population census in Suwarni and Selviana's research (2015). However, the high rate of adolescence is not matched by good adolescent behavior. This can be seen from the data that about 1% of boys and 4% of girls in Indonesia have had sexual intercourse before the age of 23 years; some people are as young as 10 years. It is also reported that 4% of the population aged 13 and 14 have had sexual intercourse because of the great curiosity due to physical and physical changes during puberty. This also has an impact on the increase in abortion cases performed by adolescents, which reaches 2-2.6 million cases per year or about 43 cases of abortion per 100 pregnancies between 15-24 years (Hasanah, H., 2016).

According to CDC (Center for Disease Control) (2016), the problems related to adolescent health are the number of students who have sexual intercourse (47.4%), those having sexual intercourse in the last 3 months (33.7%), those without using a condom during sexual intercourse (39.8%), and those having sexual intercourse with four or more people during his/her life (76.7%). Another problem related to health is the incidence of HIV/AIDS that can be seen from a study conducted by Wijaya et al. (2014). It is recorded that 1615 cases of HIV/AIDS are 50% aged 15-25 years.

In Jakarta alone, HIV and AIDS cases in adolescents are at the highest provincial prevalence, at 22,925 and 6,299 cases, respectively. Judging from the level of knowledge of adolescents about the health, those who had adequate knowledge about the health of the association were 19, 50%, had sufficient control were 37.28% while having low knowledge were 43.22%. It appears that there is a statement that the level of knowledge about health is related to health problems (Lestari. E., 2014). Based on this background, the authors are interested in conducting research on the relationship between gender and age with the level of knowledge of adolescents about health in RW 03 Tanah Tinggi Village, JoharBaru Sub-District.

II. METHODS

This quantitative analytic study used a cross sectional approach with primary data obtained from the results of a questionnaire about adolescent knowledge concerning reproductive health,

gender, and age. The research population was a group of subjects who were the object or target of research (Notoatmodjo S., 2010). The population in this study were all adolescents aged 10-18 years who were in Rw 03 Tanah Tinggi Village, JoharBaru Sub-District. The research sample was part of the object under study and was considered to represent the entire population (Notoatmodjo S., 2010). The sample in this study used accidental total sampling, namely 56 adolescents.

The variables of this study consisted of independent variables) and dependent variables. The independent variables were gender, age and source of information, while the dependent variable was the level of knowledge among adolescents. The instrument used by researchers was a questionnaire used to retrieve primary data. To find out whether the questionnaire was able to measure what was being measured, the validity and correlation tests were carried out between the scores (values) of each item (question) and the total score of the questionnaire. The test technique used was the "Cronbach's Alpha" test.

The questionnaire used a valid test value of $P = 0.0333$ and reliability ($r = 0.8385$). For data processing, after the respondents filled out the questionnaire completely, the editing, coding, entry, and cleaning stages were carried out. Univariate analysis in this study aimed to determine the level of knowledge of adolescents about adolescent reproductive health, while bivariate analysis was carried out on two variables which were thought to be related. Analysis of the results of statistical tests used the Chi square. This test used SPSS 20 software. The significance level was 0.05.

III. RESULT

The characteristics of the respondents consisting of age, gender, source of information, and knowledge are first displayed.

Table 1. Respondent Frequency Distribution by Age

Age (y)	n	%
10-12	27	48.2
13-15	15	26.8
16-19	14	25.0
Total	56	100.0

Based on Table 1, it is known that there were 56 (100%) number of respondents. The largest percentage of the age group was the 10-12 year age group as many as 27 respondents (48.2%) and the lowest was the 16-19 age group as many as 14 respondents (25.0%).

Table 2. Respondent Frequency Distribution by Gender

Sex	N	%
Male	36	64.3
Female	20	35.7
Total	56	100.0

Based on table 2 it is known that the gender of the most respondents was male as many as 36 respondents (64.3%) and the lowest was female as many as 20 respondents (35.7%).

Table 3. Respondent Frequency Distribution based on Information Sources

Information source	n	%
Face-to-face	28	50.0
MassaMedia	28	50.0
Total	56	100.0

Based on table 3, it is known that the source of respondent information obtaining face-to-face was 28 respondents (50.0%), while information sources obtained from the mass media were 28 respondents (50.0%).

Table 4. Respondent Frequency Distribution by Knowledge

Knowledge	n	%
Lower	34	60.7
Good	22	39.3
Total	56	100.0

Knowledge is said to be sufficient if the respondent gets an answer score more than the median value of the 32 questions asked while the knowledge is said to be lacking if the respondent gets an answer score \leq the median value of the 32 questions asked. Based on table 4, it is known that of the 56 respondents, there were 34 respondents (60.7%) who had lower level of knowledge about reproductive health and 22 respondents (39.3%) had good knowledge.

Table 5. The Relationship Between Age and Reproductive Health Knowledge

Age (y)	Knowledge				Total	P
	Bad		Good			
	N	%	N	%	N	%
10-12	22	81.5	5	18.5	27	100.0
13-15	6	40.0	9	60.0	15	100.0
16-19	6	42.9	8	57.1	14	100.0
Total	34	60.7	22	39.3	56	100.0

Based on table 5, it is known that for those in their early teens there were 22 respondents (81.5%) with lower level of knowledge and 5 respondents (18.5%) with good knowledge. For respondents in middle adolescence, there were 6 respondents (40.0%) having lower level of knowledge and 9 respondents (60%) with good knowledge. For late adolescence, there

were 6 respondents (42.9%) with lower knowledge, and 8 respondents (57.1%) with good knowledge.

Furthermore, the results of the Chi Square test of the effect of adolescent age with knowledge of reproductive health obtained a significance value (p-value) of 0.009. The p-value of the test was smaller than 0.05, so it is concluded that there was an effect of age and adolescent knowledge about adolescent reproductive health.

Table 6. The Relationship between Gender and Adolescent's Knowledge

Sex	Knowledge				Total	p	
	Bad		Good				
	N	%	N	%	N	%	
Male	19	52.8	17	47.2	36	100.0	<i>p</i> =0.103
Female	15	75.0	5	25.0	20	100.0	
Total	34	60.7	22	39.3	56	100.0	

Based on table 6, it is known that, of male respondents, 19 respondents (52.8%) had less knowledge and 17 respondents (47.2%) had good knowledge. For women, of 20 respondents, 15 respondents (75%) had less knowledge and 5 respondents (25%) had good knowledge. From the results of statistical tests, the obtained p value was 0.103 or $p > 0.05$. Thus, there was no relationship between gender and adolescent knowledge and adolescent reproductive health.

Table 7. The Relationship between Information Sources and Knowledge about Reproductive Health

Information source	Knowledge				Total	p	
	Bad		Good				
	N	%	N	%	N	%	
Face-to-face	22	78.6	6	21.4	28	100.0	<i>p</i> =0.006
Media Masa	12	42.9	16	57.1	28	100.0	
Total	34	60.7	22	39.3	56	100.0	

Based on table 7, it is known that the knowledge of adolescent respondents was divided into knowledge obtained from face to face and from the mass media. Of 28 respondents from face to face, 22 respondents (78.6%) had less knowledge, and 6 respondents (21.4%) had good knowledge. Meanwhile, 28 respondents (42.9%) had less knowledge about health and health information through mass media, and 16 respondents (57.1%) had good knowledge. The results of statistical tests obtained a p value of 0.006 or $p < 0.05$. Thus, there was a relationship between the sources of information obtained by adolescents and the level of knowledge of adolescents about reproductive health.

IV. DISCUSSION

Relationship between Age and Adolescent Knowledge about Reproductive Health

Based on the definition of adolescents according to WHO (2011), i.e., someone aged 10-19 years and not married, all respondents in this study were categorized as adolescents. Age is a

very important role in the maturity and strength of a person in thinking and working. Individual age is calculated from birth to birthday.

According to Hurlock (2011), the older they are, the level of maturity and strength of a person will be more mature in thinking and working which can also affect the level of knowledge on adolescent reproductive health. Adolescence is a period of adjustment from childhood to adulthood. At this time the sense of curiosity greatly increases. In the early adolescence age 10-12 years, adolescents experience a rapid increase in growth and physical maturation, intellectually and emotionally. Mostly occurs in self-assessment and self-restructuring. After that adolescents enter the middle adolescence age 13-15 years, this age adolescents enter new thinking skills, to prepare for the arrival of adulthood, and in the late adolescence age 16-19 years, a period towards the adult period indicates the maturity of the functioning of the intellect to look for more new experiences.

Table 5 shows that there was a relationship between adolescent age and adolescent knowledge about reproductive health. This was based on the results of the Chi Square statistical test which obtained a p value of 0.009 or $p < 0.05$. This is in line with the 2017 IDHS data which shows that adolescents with age 15-19 years of age had good knowledge, compared to teenagers who were less than 15 years old.

Relationship between Gender and Adolescent Knowledge About Reproductive Health

Sex is the difference between a woman and a man biologically since a person is born. Sex is related to the bodies of men and women, where men produce sperm, while women produce eggs and are biologically capable of menstruation, pregnancy and breastfeeding. Biological differences and biological functions of men and women are not interchangeable between the two, and their functions remain with men and women in all races on earth. Male adolescents tend to have lower knowledge than women. This is because male students feel indifferent in maintaining their reproductive health, as well as the needs and understanding needed by women more than men, starting from changes in physical development, problems with reproductive organs, and how to care for and maintain reproductive organs.

Based on table 6, it is known that there was no relationship between gender and adolescent knowledge with reproductive health. This was based on the Chi Square statistical test which obtained a p value of 0.103 or $p > 0.05$. Thus, this research is in line with research conducted by Masfiah, et al. (2013) that gender does not significantly affect the level of knowledge about reproductive health. adolescents. This is also in line with research conducted by Rostiati and Sari (2017) that male students had less knowledge than the female ones

Relationship between Information Sources and Adolescent Knowledge About Reproductive Health

Sources of information are the media used by adolescents to obtain information about reproductive health, such as electronic/mass media, teachers, parents, or health workers. The mass media, both printed and electronic, have a significant role in providing correct information about adolescent reproductive health. With information, adolescents will know what to do and what to avoid in order to maintain their reproductive health (Azriani et al, 2011).

Based on table 7, it is known that there was a relationship between information sources and knowledge about adolescent reproductive health. This was based on the Chi Square statistical test which obtained a p value of 0.006 or p value <0.05. Thus this study is in line with research conducted by Nasria (2010) regarding the factors that influence adolescent knowledge about reproductive health. The results show that most adolescents got reproductive health information from mass media, i.e., the internet (31.51%), friends (30.14%), magazines (21.92%), and lovers (16.44%). This is in line with previous research conducted by Wahyuni (2012) showing that there was a relationship between sources of information and adolescent knowledge about sexually transmitted diseases with a p value of 0.00 (p> 0.05).

V. CONCLUSION

There is a relationship between age and adolescent knowledge about reproductive health. Likewise, there is a relationship between sources of information and adolescent knowledge about reproductive health. However, there is no relationship between gender and adolescent knowledge about reproductive health.

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