



Original Research

Correlation Between Knowledge, Mother's Support, Peer Support with Anxiety to Confront Menarche among Adolescents at Elementary school: A Correlational Study

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ABSTRACT

Introduction: Menarche can affect the physical and psychological changes of a young woman; one of them is anxiety. The purpose of this research was to know the relationship between knowledge, mother's support, and peer support with adolescent's anxiety in confronting menarche.

Methods: This study was an analytic correlational-cross sectional design. The population is a fourth-grade student of Elementary School Rungkut Menanggal 1, Rungkut Menanggal 2, and Rungkut Kidul 1 school year 2018/2019, which has not experienced menarche, totaling 148 students. The respondents were 108 students that had been recruited by the Random Sampling method with slovin formula. The Independent variables are knowledge, maternal support, and peer support. The dependent variable was adolescent's anxiety in confronting menarche. The data were collected using a questionnaire, analyzed using the spearman rank correlation test.

Results: The result of statistical test showed that knowledge ($r = -0.626$ $p = 0.018$), mother's support ($r = -0.725$ $p = 0.000$) and peer support ($r = -0.581$ $p = 0.000$) correlated with the anxiety of adolescent's anxiety in confronting menarche.

Conclusion: Knowledge, mother's support, and peer support can reduce adolescent's anxiety in confronting menarche because it can be used as a provision to prepare for menstruation.

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1. INTRODUCTION

Adolescence is the stage of a person where adolescents are in the phase of children to adults characterized by physical, behavioral, cognitive, biological and emotional changes that have an age range between 10 to 19 years and are not married (Effendi and

Makhfudli, 2011). As a biological development, young women will go through a phase where young women will reach the maturity stage of sexual organs that have the ability to reproduce called puberty. Puberty in adolescent girls can be characterized by hormonal changes that cause the arrival of menstruation for the first time or what is

called menarche (Solihah, 2013). Menarche is an important event in adolescent life as a marker of fertility and one of the signs that adolescents have entered puberty. The data obtained from Riskesdas (Riskesdas, 2010) shows that the first menstrual age is 37.5% at the age of 13-14 years, 19.8% at the age of 15-16 years, 4.5% at the age of 17 years and above and 0.1% of the age 6-8 years old. The age of menarche in developing countries, including Indonesia, has experienced a shift in age from the initial age of 16-17 years to the age of 12-13 years (Rasjidi, 2010).

Menarche can cause psychological changes for young women, including emotional changes in the form of feelings of anxiety. Psychological changes in anxiety felt by adolescents such as shock and even trauma, fear, being irrational, difficult to concentrate and easily offended (Sommer, M, Sutherland, C& Chandra-Mouli, 2015). Anxiety experienced by young women often occurs when go through a period of menstruation for the first time, especially for those who are still in the early menstrual cycle that occurs due to hormonal factors (Golchin, NA, Hamzehgardeshi, Z, Fakhri, & Hamzehgardeshi, 2012). Anxiety experienced by young women can affect the learning process resulting in decreased student achievement (Jayanti, NF& Purwanti, 2012). So far, knowledge about menstruation is only obtained by adolescents when they have experienced menarche, so that it results in the unpreparedness of adolescents in the face of menarche which has an impact on anxiety (Widhaninggar, 2010). The impact of anxiety in the face of menarche that is not handled properly will be one of the inhibiting factors in learning that interfere with the performance of cognitive functions and feelings of inferiority will arise so that he does not dare go out of the house and even go to school, based on that experience adolescents use menstruation as self-defense mechanisms that will be used by adolescents to be free from duties or avoiding school (Kartono, 2010).

According to research in Elementary School 1 Kretek, Paguyangan District, Brebes Regency in 2011 there were 48 children, 27 children (56.25%) were not ready to face menarche and the remaining 21 children (43.75%) were ready to face menarche

(Jayanti, NF& Purwanti, 2012). States that of the 60 adolescents who have not experienced menarche there are 45% experienced mild anxiety levels, and 55% experienced severe anxiety levels, anxiety in adolescent girls can cause a decrease in enthusiasm for learning resulting in impairment, and some (25%) young women who experience severe anxiety are reluctant to go to school within a few days and this greatly influences the process of student learning (Sasongko, 2010).

Adolescent readiness in dealing with menarche is influenced by several factors. Adopting from Lawrence Green's theory (Green, LW & Kreuter, 1991) explains that behavior is influenced by 3 factors, predisposing factors, enabling factors and reinforcing factors (Jayanti, NF& Purwanti, 2012). Predisposing factors that can affect adolescent readiness in go through a period of menarche include knowledge, attitudes, beliefs and age. Supporting factors that can affect adolescent readiness in dealing with menarche include the availability of health infrastructure facilities and health regulations. While the driving factors that can affect the readiness of adolescents in the face of menarche include family support: mothers, peer support, the behavior of health workers, and the behavior of community leaders. The purpose of this research was to know the relationship between knowledge, mother's support and peer support with adolescent's anxiety in confronting menarche in Elementary School Rungkut Menanggal 1, Elementary School Rungkut Menanggal 2 dan Elementary School Rungkut Kidul 1.

2. METHOD

2.1 Design

This research was a quantitative study with a Quasy-Experiment research design with Pre-Test Post-Test Control Group Design. This design was to reveal the causal relationship by involving the control group in addition to the experimental group (Nursalam, 2015). The design in this study the experimental group was given an intervention while the control group was not given an intervention only aired a conceptual video.

2.2 Population, Samples, and Sampling

The population was a fourth grade student of Elementary School Rungkut Menanggal 1, Rungkut Menanggal 2 and Rungkut Kidul 1 school year 2018/2019 which has not experienced menarche, totaling 148 students. The respondents were 108 students that had been recruited by Random Sampling method with slovin formula.

2.3 Variables

The Independent variables were knowledge, maternal support and peer support. The dependent variable was adolescent's anxiety in confronting menarche.

2.4 Instruments

The data were collected using 4 questionnaires, the knowledge questionnaire was adopted from Haestywati (Haestywati, 2010) with a validity value of 0.444 and a reliability value of 0.904. The mother support questionnaire adopted from Selfiana (Selfiana, 2017) with a validity value of 0.444 and a reliability value of 0.958. The peer support questionnaire adopted from Selfiana (Selfiana, 2017) with a validity value of 0.482 and a reliability value of 0.954. Anxiety questionnaire adopted from Haestywati (Haestywati, 2010) with a validity value of 0.444 and a reliability value of 0.968. Questionnaires were distributed directly to respondents.

2.5 Procedure

The study was conducted at Elementary School Rungkut Menanggal 1, Elementary School Rungkut Menanggal 2 and Elementary School Rungkut Kidul 1. The study was conducted from the preparation of the proposal until publication, namely from March to July 2019. Before conducting research, researchers applied for a research permit to the Academic Department of Nursing and subsequently will collaborate with Rungkut Menanggal 1 Elementary School, Rungkut Menanggal Elementary School 2 and Rungkut Kidul Elementary School 1. As an initial step in the study, researchers selected Rungkut Menanggal 2 Elementary School and Rungkut Kidul 1 Elementary School which totaled 108 students, each school consisting of 36

respondents. After that the researchers asked for help from the homeroom teacher to collect students who had been selected in one class followed by an explanation and distribution of informed consent in advance, the informed consent was under return by the respondent and given to the respondent's parents / guardians to be signed as sign of approval in participating in research activities. The next day the respondent was asked to bring back informed consent that was signed by the respondent's parents / guardians and collected it to the researcher, then the respondent was given a questionnaire sheet and during the filling process the researcher was assisted by 1 friend who was tasked with ensuring and directing the respondents to fill out the questionnaire itself according to the conditions. Respondents who did not understand the meaning of the question immediately asked the researcher and then the researcher explained to the respondent. The completed questionnaire was returned to the researcher and then assessed or tabulated by the researcher.

2.6 Analysis

The data in this study used univariate and bivariate analysis. Bivariate analysis is used to describe the relationship between the independent variables consisting of knowledge factors, mother and peer support with the dependent variable namely adolescent girls anxiety by using the SPSS system computerized statistical test with the Spearman rank correlation test.

2.7 Ethical Clearance

This research has passed the ethical test conducted by the Health Research Ethics Commission of the Faculty of Nursing, Airlangga University. The certificate passed the ethical test signed on May 27, 2019 with certificate number 1441-KEPK.

3. RESULT

Based on table 1 it can be seen that the majority of respondents aged 10 years were 99 respondents (91.7%). The last education of mothers more college graduates with several 56 (51.9%). Most of the respondents'

mothers were 87 (80.6%) housewives and 26 (24.1%) students had menstruating.

Based on table 2 shows the results of statistical analysis using the Spearman Rank Correlation test, the knowledge variable obtained p significance of 0.018 (<0.05), which means rejecting H0. This means that there is a relationship between knowledge and adolescent anxiety facing menarche. The resulting strong relationship is r of -0,626 which means that the 2 variables have a strong relationship. The direction of the relationship is 2 negative variables, meaning that the level of knowledge is the opposite direction to adolescent anxiety. The higher the level of adolescent knowledge about menarche, the level of adolescent anxiety will go down / low. In the variable of maternal support, the significance of p was 0,000 (<0.05), which means rejecting H0. This means that there is a relationship between maternal support and adolescent anxiety facing menarche. The resulting strong relationship is r of -0.725 which means that the 2 variables have a strong relationship. The direction of the relationship is 2 negative variables, meaning that maternal support is the opposite direction to adolescent anxiety. The

higher maternal support that is obtained by adolescents, the level of adolescent anxiety will go down / low. In the peer support variable, the significance of p is 0,000 (<0.05) which means rejecting H0. This means that there is a relationship between peer support and adolescent anxiety facing menarche. The resulting strong relationship is r of -0.581 which means that the 2 variables have a strong relationship. The direction of the relationship is 2 negative variables, meaning that peer support is the opposite direction to adolescent anxiety. The higher the peer support that is obtained by adolescents, the level of anxiety of adolescents will go down.

Based on table 3 shows that respondents with less knowledge are the most understood indicators of menstrual definitions, the most understandable enough knowledge is the menstrual cycle indicator and the best understood knowledge is an indicator of physical and emotional changes. In the variable of mother support, respondents with less maternal support mostly received maternal support in the instrumental

Table 1. Characteristics Respondents (n=108)

Characteristics Respondents	Categori	n	%
Age	10 years	99	91.7
	11 years	9	8.3
Sibling	Ada	26	24.1
	Tidak Ada	82	75.9
Mother's Education	Junior High School	3	2.8
	High School	49	45.4
	College	56	51.9
Mother's Job	Housewife	87	80.6
	Private	7	6.5
	Entrepreneur	7	6.5
	Civil Servant	7	6.5

Table 2. Indicators of knowledge. mother's support and peer support with Adolescent's Anxiety to Confront Menarche

Variables	Categori					
	Less		Enough		Well	
	n	%	n	%	n	%
Knowledge						
Definition of menstruation	8	7.4%	41	38%	59	54.6%
Menstrual cycle	5	4.6%	47	43.6%	56	51.8 %
Physical change and emotion	3	2.8%	39	36%	66	61.2%
Mother's Support						
Informational Support	5	4.6%	49	45.4%	54	50%
Instrumental Support	8	7.4%	43	39.9%	57	52.7%
Emotional Support	3	2.8%	45	41.7%	60	55.5%
Peer Support						
Informational Support	29	26.9%	0	0%	79	73.1%
Instrumental Support	18	16.7%	0	0%	90	83.3%
Emotional Support	14	12.9%	0	0%	94	87.1%

Table 3. Analysis of the relationship of Knowledge Mother’s Support and Peer Support with Adolescent’s Anxiety to Confront Menarche

Variables	Adolescent’s Anxiety to Confront Menarche				Total		p	r
	Moderate		Mild		n	%		
	n	%	n	%				
Knowledge								
Well	16	14.8	22	20.4	38	35.2	p=0.018	r= -0.626
Enough	17	15.7	33	30.6	50	46.3		
Less	0	0	20	18.5	20	18.5		
Mother Supprt								
Well	11	10.2	32	29.6	43	39.8	p=0.000	r=-0.725
Enough	0	0	11	10.2	11	10.2		
Less	22	20.4	32	29.6	54	50		
Peer Support								
Well	12	11.12	42	38.88	54	50	p=0.000	r=-0.581
Enough	0	0	0	0	0	0		
Less	21	19.48	33	30.52	54	50		

domain, respondents with sufficient maternal support mostly received maternal support in the informational domain, while respondents with good maternal support mostly received maternal support in the emotional domain. In the variable of peer support, respondents with less peer support mostly received support in the informational domain, respondents with good peer support mostly received support in the emotional domain..

4. DISCUSSION

Adolescent knowledge about menarche will be obtained by adolescents from the surrounding environment such as friends, mothers and teachers. However, based on the results of the study, it was found that teenagers get the most information about menstruation from their peers who have menstruated first, and usually peers will tell negative things about menstruation such as menstruation is a disgusting thing and it hurts so much that we cannot do daily activities. Teenagers will usually just believe with peers who tell stories, and this makes teenagers experience anxiety in the face of menstruation. Based on the results of the analysis of research data, it is known that the respondent's level of knowledge regarding menstruation is in the sufficient category. The proportion of respondents with good knowledge is still higher than the number of respondents who lack knowledge, this can be influenced by the family or school environment.

In accordance with Notoatmodjo's theory (Notoatmodjo, 2015) knowledge is influenced by education, age, occupation and the environment. Age is the level of human life, as an individual grows older, they get a higher level of education so that the knowledge obtained continues to grow and develop so that he used to think more realistically (Astutik, 2010). In the study respondents have ages 9-10 years are the early adolescent groups where adolescents appear and indeed pay more attention to the state of his body and start thinking (abstract). The study involved respondents who had not experienced menarche so that respondents had no experience about menstruation. Children's ignorance about menstruation can cause children to be difficult to accept menarche (Beadle, S, & Cahill, 2013). Knowledge is very important to prepare teenagers to face menarche, in line with research conducted by Subhash in Saoner Nagpur District (Subhash B. Thakre., 2011), India shows that the need for teenagers to have awareness about the need for accurate information / knowledge about menstruation is very important to prepare for menarche without anxiety.

The results showed a relationship between knowledge and anxiety among adolescent girls facing menarche with the direction of the correlation of the two variables being negative, which means that if the knowledge of adolescents is good, the anxiety level will go down. The results of the study are in accordance with research conducted by Sellia (Sellia & Juwita, 2018)

entitled the relationship between knowledge and readiness of young women in dealing with menarche in Tidore Islands Middle School, which shows a relationship between knowledge and adolescent readiness to face menarche, and the results are 65.5% of respondents experiencing unpreparedness in face menarche due to lack of knowledge about menstruation. Likewise in a study conducted by Nurma (Nurma, 2018) entitled the relationship of the level of knowledge of adolescents about menstruation with the attitude to face menarche in ELEMENTARY SCHOOL 3 Bantul Yogyakarta students, which shows the relationship between adolescent knowledge about menstruation with the attitude toward menarche, that the better knowledge about menstruation the more adaptive the mechanisms of adolescent coping. Teenagers' ignorance of menstruation can make it difficult for adolescents to accept menarche, in other words the existence of a deep understanding of the menstrual process so that teens will be ready to accept and experience first menstruation as a normal process. So it can be said that knowledge about menstruation has an important role in overcoming anxiety that arises when experiencing menarche.

Based on the results of data analysis of research conducted, half of respondents received less support from mothers. Mother's support is most often obtained by adolescents, namely emotional support in the form of approaches to adolescents as well as advice and encouragement about menarche problems so as not to experience anxiety. Social support is support given both materially, information, and emotions that are useful for improving one's physical and psychological state (Widhaninggar, 2010). Early adolescence still has a strong desire to depend on parents while trying to be independent. Mothers must be emotionally supportive and knowledgeable about menstruation (White, 2013). The influential factor in providing social support is education (Triyanto, E & Iskandar, 2014). Respondents number 10 and 21 get less support from the last education of the respondent's mother who is a junior high school, but in contrast to respondents number 2 and 13, they get good support from the last education level of the university

mother. The level of education of the mother can influence the support provided, the higher the level of one's knowledge, the higher the level of understanding and understanding. Likewise, the mother's knowledge of the condition of a person experiencing menstruation, which is well known to the mother, will help her in providing the support needed by her teenage daughter. Most of the mothers of the respondents were housewives, as many as 87 (80.6%), the results of the study found that adolescents whose mothers were housewives / not working they tended not to experience anxiety that was too high compared to working mothers, because with a mother who always accompanies her daughter at home will provide great effectiveness against the reduction of adolescent anxiety. In accordance with the results of research conducted by White (White, 2013) showing that the role of mothers is very important to provide true and accurate information about reproductive health for their children, as many as 76.95% of respondents said that the main source of information about menstruation they are mothers.

The results showed a relationship between maternal support and anxiety among adolescent girls facing menarche with a negative correlation between the two variables, which means that if the mother's support is good, the anxiety level will go down. The results of this study are in accordance with research conducted by Fajri (Fajri, A& Khairani, 2011), titled the relationship between mother-child communication with readiness to face the first menstruation (menarche) on the students of SMP Muhammadiyah Banda, which shows the relationship between mother-child communication with readiness to face the first menstruation (menarche) with the result of mother child communication has a positive relationship in adolescent readiness to face menarche with a good communication relationship by the remaining 60% influenced by media information factors and friends. The results are also in line with Green's theory which shows that social support which is one of the supporting factors or reinforcing factors has a relationship with one's behavior in this case

is adolescent anxiety. Support given by the mother will provide comfort and openness to the child so that the child can tell problems and complaints that can reduce children's anxiety (Beadle, S, & Cahill, 2013).

Based on the results of data analysis of research conducted, it was found that half of respondents received good support from peers and the rest received less support from peers. Support from peers can influence adolescents in the face of menarche, because peers will tell stories and share their experiences when experiencing menarche first. Peers or peers are children with more or less the same level of maturity (Papila, D, Old, S & Feldman, 2010). One of the most important functions of peer groups is to provide sources of information and comparisons about the world outside the family, through groups of teenage peers receiving feedback from their friends about their abilities (Jayanti, NF& Purwanti, 2012). Teenagers judge what they do, whether he is better than his friends, the same, or worse than what other teenagers do. This will be difficult to do in the family because siblings are usually older or younger (Santrock, 2007). Peer support is a system of giving and receiving assistance based on certain principles such as shared responsibility, and mutual help between friends. Peer support is the role of peers who are about the same age as teens. Peer support is very important for adolescents because adolescents have a desire to be accepted in the group, what is conveyed by friends or used by friends will make teens tend to imitate them (Harini, 2013). In accordance with research conducted by Papila (Papila, D, Old, S & Feldman, 2010) showing that peer support influences adolescent attitudes in preparing for menstruation, as many as 59% of respondents indicate that their friends always tell when menstruation comes, things that are commonly told are about how the first taste of menstrual blood out and how to clean it.

The results showed a relationship between peer support and the anxiety of young women facing menarche with the direction of the correlation of the two variables being negative, which means that where if peer support is good, the anxiety level will go down. The results of this study

are in accordance with research conducted by Fajri (Fajri, A& Khairani, 2011), entitled Social support of mothers and peers with the readiness of adolescents to face menarche at Elementary School 2 Mojoagung, which shows the relationship between social support of mothers and peers with adolescent readiness to face menarche.

5. CONCLUSION

Knowledge about menarche can reduce the anxiety of young women in dealing with menarche because by getting knowledge and information before menstruation, teenagers will be better prepared to deal with menarche. Mother's support can reduce the anxiety of young women in the face of menarche because with the support of the closest people like mothers, teenagers will feel calmer and understand how to deal with menarche without significant anxiety. Peer support can also reduce the anxiety of young women in dealing with menarche because peers can make teens more confident and can share experiences with each other.

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