

Original Research Article

Menstrual knowledge associated with adolescent's attitude of intellectual disability on facing menstruation in Bantul, Indonesia

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ABSTRACT

Background: Menstruation is an important event in puberty as a biological sign of sexual maturity for young women. Adolescent with intellectual disability has the same stage of biological development as normal adolescent. Menstruation often causes many problems such as menstrual pain, emotional changes and menstrual personal hygiene (such as: using sanitary napkins). It causes a lot of negative reactions and anxiety. The phenomenon that has often happened in community is feeling taboo to discuss menstrual problems, so that adolescents are not well informed. Objective of this study was to determine the association between menstrual knowledge with adolescent's attitude of mental retardation (intellectual disability) on facing menstruation.

Methods: This research is a descriptive analytic with a cross-sectional study. It was conducted at SLB Masudi Putra I and II Bantul, in August to October 2018 with intellectual disability adolescents who experienced menstruation, those were 39 respondents. Data collection is done by using a questionnaire. Bivariate analysis was done by the Spearman rank test.

Results: The results of this research indicate that the percentages of adolescent's knowledge of intellectual disability on facing menstruation were in medium category of 16 respondents (41.0%), and adolescent's attitude of intellectual disability on facing menstruation mostly were negative of 24 respondents (61.5%) with p-value 0.001 ($p < 0.05$) and the correlation coefficient (r) is positive at 0.495. It shows that there is an association between menstrual knowledge with adolescent's attitude on facing menstruation with the closeness of the correlation in medium category.

Conclusions: There were an association between menstrual knowledge with adolescent's attitude of intellectual disability on facing menstruation at SLB Marsudi Putra Bantul with p-value 0.001 ($p < 0.05$).

Keywords: Attitude, Intellectual disability, Knowledge, Menstruation

INTRODUCTION

Adolescent with mental retardation (intellectual disability) is a child with below-average intelligence, and is accompanied by inability to adapt behaviors that arise during the developmental period.¹ According to the World Health Organization there were 15% of the world's population or 785 million people experiencing mental and physical disorders. According to the National socio-

economic survey (Susenas) conducted by the Central Bureau of Statistics (BPS) in 2012, the number of persons with mental retardation in Indonesia was 6,008,661 people. Of these, around 1,780,200 (29.62%) people were blind, 472,855 (7.86%) people with hearing impairments, 402,817 (6.70%) people had multiple retardations.^{2,3}

The number of adolescents with mental retardation in Yogyakarta is quite large of 2,927 people. The results of

the 2014 Special Province of Yogyakarta Education Office Data show that adolescent who attended SLB was 4,289 adolescents. Based on data from the Education Authorities in Yogyakarta province, the total number of mental retardations in Yogyakarta was 4,289. The mental retardation cases in each province of special region of Yogyakarta are: Yogyakarta city had 545 (12.71%) people, Bantul district had 873 (20.35%) people, Kulonprogo had 273 (6.36%) people, Gunung Kidul district had 307 (7.15%) people and Sleman district had 929 (21.66%) people. The large number of mental retardation adolescents will greatly affect population growth in the future, and need serious attention, because it is very risky for reproductive health problems such as premarital sexual behavior, unwanted pregnancies, health and human immune deficiency virus/acquired immunodeficiency syndrome (HIV/AIDS).^{3,4}

The problems of adolescent reproductive health can be said as a period of confusion in which adolescents did not have sufficient knowledge about the development and physical changes of their own bodies. One of developing adolescent toward sexual maturity is called as puberty. According to Hurlock, puberty is a period in the range of development when children change from asexual beings to sexual beings.^{5,6} The most important event in puberty for adolescent is the arrival of menstruation, as a biological sign of sexual maturity. Adolescent with mental retardation has the same stage of biological development as normal adolescent.^{7,8}

The arrival of menstruation can cause anxiety reactions for adolescent. Anxiety for some respondents who had menstruation occurs when menstruation does not come regularly in every month, abdominal pain, waist aches, unstable emotions at the beginning of menstruation, fear of the blood release that sometimes a lot and a little, and fear when menstrual blood penetrates in the pants.⁹ The phenomenon that has often happened in the community is feeling taboo to discuss menstrual problems, so that adolescent get insufficient good information about physical and psychological changes related to menstruation.¹⁰⁻¹² The research results of knowledge, attitudes and menstrual behavior from 110 respondents had good knowledge in 61 respondents (55.5%), and 49 respondents (44.5%) had insufficient knowledge of menstruation.

The 49 respondents who had less knowledge about 55.1% experienced in menstrual disorders. While, the results of menstrual attitudes measurement of 54 respondents (49.1%) had a good attitude and 58 respondents (50.9%) had a bad attitude on facing menstruation.¹³

Readiness and attitude on facing menstruation are very necessary because many intellectual disability adolescents also do not understand what they should do when getting menstruation, such as menstrual blood which is transparent to clothes, unwilling to use sanitary napkins, improper using sanitary napkins, unwilling to

replace sanitary napkins, unstable emotions, menstrual pain and poor personal hygiene.^{8,12}

Knowledge of menstruation can affect the attitude and behavior of the next menstruation. Health during menstruation must be considered because it is important and good opportunity for adolescent to understand their body and reproductive health.⁵

Based on the description above, the author is interested in conducting research on the association between knowledge with the adolescent's attitudes of mental retardation (intellectual disability) on facing menstruation.

METHODS

This research is non-experimental quantitative; analytic descriptive with a cross-sectional approach in which researcher wants to know the association between knowledge with adolescent's attitudes of mental retardation on facing menstruation. The location of the research was conducted at school of child with special need of Masrudi Putra 1 and 2 Bantul in August to October 2018.

The independent variable in this research is adolescent's menstrual knowledge of intellectual disability on facing menstruation, while the dependent variable is the adolescent's attitude of intellectual disability on facing menstruation.

The location of the study was carried out at school of child with special need of Marsudi Putra I and II in Bantul district. Data collection was carried out on August-October 2019, with 39 respondents using the total sampling technique.

Inclusion criteria

- Youth with mild and moderate intellectual disability
- Have menstruation
- Able to write
- Able to hear and speak.

Exclusion criteria

- Having reproductive disorders such as ovarian cysts, uterine myomas.

After taking an informed consent from the parents, a detailed and comprehensive student/respondent's sociodemographic history, student was interviewed face to face in the office with prior appointment by three members of researcher and nursing college student. Researcher will help students if they did not understand about the questionnaire.

Data collection instrument used sheets of respondents' characteristics, questionnaires of adolescent's knowledge

level of intellectual disability facing menstruation, adolescent's attitude questionnaires facing menstruation, and interviews to complete the data. The collected data is done by editing, coding, data entry, and tabulating.

Statistical analysis

Data analysis used is univariate and bivariate analysis, using spearman. This research has received approval from the ethics commission of the University of Jenderal Achmad Yani Yogyakarta Number: S. Kep/426/STIKES/VIII/2018.

RESULTS

Characteristics of research subject

Respondents in this research are intellectual disability adolescents at school of child with special need of Marsudi Putra 1 and 2 Bantul which totaled 39 respondents. Based on Table 1, the majority of respondents is around 17-25 years old (61.5%), getting menstrual information is from their parents, some respondents' fathers who in middle education are (51.3%) and from mothers who in basic school educated (59%). The fathers' profession mostly work as farmers or laborers (53.8%) and the mothers' profession is mostly as housewives (97.4%).

Table 1: Characteristics of research subject.

Characteristics	Frequency	Percentage
Age of respondent (year)		
Early teen (12-16)	15	38.5%
Late teen (17-25)	24	61.5%
Source of menstrual information		
Friend	0	0%
Parent	26	66.7%
Teacher	7	17.9%
Health worker	6	15.4%
Mass media	0	0%
Education of parents		
Father		
Basic education (elementary school, junior high school)	15	38.5%
Middle education (senior /vocational high school)	20	51.3%
Higher education (diploma, bachelor master)	4	10.3%
Mother		
Basic education (elementary school, junior high school)	23	59.0%
Middle education (senior /vocational high school)	13	33.3%
Higher education (diploma, bachelor master)	3	7.7%
Profession of parents		
Father		

Characteristics	Frequency	Percentage
Civil servant/private worker	14	35.9%
Indonesian national army/police	0	0%
Entrepreneur	4	10.3%
Farmer/labor	21	53.8%
Jobless	0	0%
Mother		
Civil servant/private worker	1	2.6%
Indonesian national army/police	0	0%
Entrepreneur	0	0%
Farmer/labor	0	0%
Jobless/housewife	38	97.4%

Adolescent knowledge of intellectual disability on facing menstruation

Based on the measurement results, the percentage of respondents' knowledge can be seen on Table 2. Table 2, shows that the majorities of respondents having knowledge on facing menstruation in medium category are 16 people (41.0%).

Table 2: Adolescent menstrual knowledge of intellectual disability on facing menstruation at school of child with special need of Marsudi Putra.

Menstrual knowledge	Frequency	Percentage
High	10	25.6%
Medium	16	41.0%
Low	13	33.3%

Adolescent's attitude of intellectual disability on facing menstruation

The results of the research on the adolescent's attitude of intellectual disability on facing menstruation are presented on Table 3. Based on Table 3, the majorities of respondents having negative attitude on facing menstruation are 24 people (61.5%).

Table 3: Adolescent's attitude of intellectual disability on facing menstruation.

Attitude of facing menstruation	Frequency	Percentage
Positive	15	38.5%
Negative	24	61.5%

Association between menstrual knowledge with adolescent's attitude of intellectual disability on facing menstruation

The results of spearman rank correlation test and cross tabulation show the association between menstrual

knowledge with attitude is presented in the following Table 4.

Table 4, shows that the majority of respondents who had knowledge about menstruation is low category which resulted in 12 people facing negative menstruation (30.8%). The results of the Spearman rank correlation test obtained a significance value (p-value) of 0.001 ($p < 0.05$)

so that, it can be seen that there is an association between menstrual knowledge with adolescent's attitude on facing menstruation. Furthermore, the value of the correlation coefficient (r) is positive at 0.495 which shows that the closeness of the association between menstrual knowledge with adolescent's attitude on facing menstruation is in medium category at intervals (0.40 - 0.599).

Table 4: Menstrual knowledge associated with adolescent attitude of intellectual disability on facing menstruation.

Menstrual knowledge	Attitude facing menstruation		Total (%)	p-value	(r) Correlation
	Positive (%)	Negative (%)			
High	7 (17.9%)	3 (7.7%)	10 (25.6%)	0.001	0.495
Medium	7 (17.9%)	9 (23.1%)	16 (41.0%)		
Low	1 (2.6%)	12 (30.8%)	13 (33.3%)		
Total	15 (38.5%)	24 (61.5%)	39 (100.0%)		

DISCUSSION

Adolescent's menstrual knowledge

Knowledge is the result of knowing which is resulted by human sensory perception processes on a particular object.¹⁴ The result of this research indicates that the adolescent's menstrual knowledge of intellectual disability at school of child with special need of Marsudi Putra I and II from 39 respondents is mostly medium category, those are 11 respondents (41.0%). This can be influenced by the sources of information obtained by respondents. Some respondents in this research received menstrual information from 26 parents (66.7%), 7 teachers (17.9%) and 6 health workers (16.4%). According to Chang in preparation for menstruation, adolescent may seek information from teachers, health workers or parents.¹⁵

In addition, menstrual knowledge can also be influenced by education and parent's profession. In this research, most of fathers are in middle education level; 20 people (51.3%), while the mothers are in basic education level; 23 people (59.0%). Based on Arfan's research on reproductive health knowledge that parental education can influence respondents' knowledge. The higher the education level of the parents, the higher the reproductive health knowledge of the respondents.¹⁶

Maternal education has a greater influence on adolescent reproductive health knowledge. Higher education can affect greater knowledge resulting a habit of maintaining better habits.¹⁷ Parental education is also not absolutely able to influence adolescent knowledge on facing menstruation. This is in accordance with Wulandari research that parental education does not affect adolescent perception of menstruation, this is possible because the topic of discussion often discussed by parents

is not always related to menstruation. And someone with low education is also not absolutely low in knowledge.¹⁸

The profession of the respondent's parent, especially fathers is 53.8% working as a farmer or laborer and mothers' profession is 97.4% as a housewife. According to Wulandari, the parent's profession can influence the role of parent in providing information related to menstruation.¹⁸ The availability of time can be the opportunity for adolescents to meet parents and discuss what they face.

Adolescent's attitude of intellectual disability on facing menstruation

The attitude of facing menstruation is a reaction or response which is often hidden by intellectual disability adolescent about some things that occur during menstruation such as discomfort, menstrual pain and emotional imbalance. The result of this research indicates that most respondents are 61.5% having a negative attitude on facing menstruation. It can be caused by the information obtained regarding menstruation still little which can be seen from the results of the answer to the question where the lowest attitude of facing menstruation is question number (2); intellectual disability adolescent feels that learning about menstruation is not necessary, question number (6); if feeling pain when menstruation comes, respondent will pretend to be fine, question number (8); respondent does not like to change sanitary napkins frequently if menstruating, question number (9); respondent feels embarrassed when buying sanitary napkins, and question number (12); if menstruating, the respondent becomes lazy to do daily activities. Based on the results of interviews with intellectual disability adolescents, most of them expressed embarrassment when telling stories about menstruation to their mothers, friends, and telling teacher only when asked. The

information obtained from teacher in the class is that menstrual education is only given at a glance at the time of learning, and there are no adequate facilities to train adolescent's independence, especially in personal hygiene during menstruation.

The result of this research is in accordance with the research conducted by Chang that is due to lack of good information about physical and psychological changes related to menstruation, social dimensions tend to assume that menstruation is a personal experience and does not need to tell others, and feeling scared and anxious if laughed by male friends when they find out she has menstruated.¹⁵ Shanbhag revealed that most adolescent had received information before they got menarche 55.1% of their mothers, 17.4% of their friends, 14.2% of their sisters, but the information they got is not sufficient because most of their mothers are 52.4% illiterate and 9.5% only graduated from elementary school.¹⁹

Association between menstrual knowledge with adolescent's attitude of intellectual disability on facing menstruation

The result of spearman rank correlation test obtained a significance value (p-value) of 0.001 ($p < 0.05$) which means that there is a significant association between menstrual knowledge with adolescent's attitude on facing menstruation. The value of the correlation coefficient (r) is positive at 0.495 which shows the closeness of association between menstrual knowledge with adolescent's attitude on facing menstruation is in medium category.

The result of this research is in accordance with the opinion of Notoatmodjo, knowledge is a result of "knowing", and it happens after someone has sensed a particular object, knowledge is a guideline in shaping one's actions.²⁰ The hope is that with the right information or knowledge, adolescents have responsible attitudes and behaviors related to their reproductive processes and menstruation.⁵

CONCLUSION

Based on the results of this research, it can be concluded

- Adolescents menstrual knowledge of intellectual disability on facing menstruation at School of Child with Special Need of Marsudi Putra mostly are in medium category, 16 respondents (41.0%).
- Adolescents attitude of intellectual disability on facing menstruation at School of Child with Special Need of Marsudi Putra mostly have negative attitude, 24 respondents (61.5%).
- There is an association between menstrual knowledge with adolescent's attitude of intellectual disability on facing menstruation at School of Child with Special Need of Marsudi Putra, in which p-

value (0.001) with a value is in medium category of association, 0.495.

Recommendations

For teachers

Teachers are expected to play an active role in preparing, providing information or incorporating health education especially menstruation in additional curricula so that students are able to perform and maintain proper personal hygiene behavior independently during menstruation.

For health workers, especially nurses

- Nurses in health services can collaborate with the school to facilitate the provision of information related to health to be able to train independence before students get the menstruation later.
- Maternity nurses can provide counseling and choose appropriate health education in solving health problems especially menstruation in adolescent with intellectual disability.

Next researcher

Future researchers are expected to conduct similar research by developing different methods and materials such as: the role of parents in preparing intellectual disability children in the face of menstruation, menstrual health education methods for children with intellectual disability, and complementary therapies that can be developed in dealing with menstrual problems in children with intellectual disability.

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