

Knowledge and Behaviour about Adolescent Reproductive Health in Yogyakarta, Indonesia

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ABSTRACT

Lack of knowledge about reproductive health in adolescent, making teens easily influenced by misinformation and harmful to their reproductive health. Health education plays an important role in increasing their knowledge and behaviour of young people in order to maintain good reproductive health. The purpose of the research was to see the impact of health education on the knowledge and behaviour of adolescents in reproductive health. Paired t test analysis results indicate that counselling on reproductive health effect on both knowledge about reproductive health (mean difference: 10.216, 95% CI: 6.622 to 13.809) and attitude about reproductive health in adolescents (mean difference: 65.417, 95% CI: 11,176 to 61.690). Knowledge of adolescents about reproductive health would be beneficial in preparing the young people in good reproductive health issues so expect teenagers do not conflict with the norms prevailing in the community.

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1. INTRODUCTION

The World Health Organization (WHO) is estimated 1.3 million adolescents died in 2012 and mostly it may be prevented or treated. On the other hand, the main cause of adolescent deaths is caused HIV, suicide, lower respiratory infections, and interpersonal violence [1]. The pregnancy is the most common problem of worldwide in 2015 and there is found mostly both low income countries and middle income countries. There has estimated 4 million girls aged 15 to 19 and 1 million girls under 15 years old give birth every year. Even though, some 3 million girls aged 15 to 19 went under unsafe abortions annually. Several studies are represented babies born and with adolescent mothers had the higher risk complication than those born with women aged 20 to 24 [2]-[4].

Adolescence is a transitional period between childhood and adulthood who have desire to accentuate his identity to search for identity. The pre-adult transition period makes adolescents are particularly prone to risky behaviour such as free sex, marijuana use, juvenile delinquency, such as drinking alcohol, and smoking [5],[6]. This is due to closely related with the influence of peers in terms of interests, attitude, appearance and behaviour [7],[8]. While the maturity of the reproductive organs and adolescent psychological development. The influence of electronic information such as television and the internet is also a great effect on the attitudes and behaviour of adolescents, including in the case of sexual perversion [9].

Lack of knowledge about the function and structure of adolescent reproductive organs make teenagers easily influenced by information that is untrue and harmful to reproductive health. Knowledge about the function and structure will affect reproduction in treating adolescent reproductive organs that will affect their reproductive health [10].

BKKBN (The survey results of The National Family Planning Coordination Board) reported 2880 respondents aged 15-24 years in six cities in West Java (May 2002) indicated that 39,65% of respondents had premarital sex [11]. BKKBN survey results of 2010, around 51% of teenagers in the area of Jabodetabek was not a virgin. A total of 4% of respondents who admitted to having sexual intercourse since the age of 16-18 years, 16% do at age 13-15 years. The incidence of premarital sex in Surabaya reached 47%, while in Bandung and Medan 52%. Free sex behaviour among teenagers have an impact on cases of infection of HIV/AIDS that tend to develop in Indonesia, while the favourite place for sexual intercourse is at home as much as 40%, in the boarding house 30%, and in the hotels 30% [12].

Meanwhile, the data from PILAR (the survey results Center for Information and Services Adolescents and PKBI (Indonesian Family Planning Association) in Central Java about premarital sexual behaviour in the students in Semarang in September 2002 against 1000 respondents i.e. 500 respondents from various colleges in Semarang revealed that activities performed while courting not just chatting, hugging and kissing the lips but had furthered i.e. do petting 25%, even 7.6% of them have made sexual intercourse [13]. The data from PKBI in Palembang, Kupang, Tasik Malaya, Cirebon, Singkawang 2005 mentioned that 9.1% of teenagers have sex and 85% of them doing their first sexual intercourse at the age of 13-15 years in their home with a girlfriend [14]. Another study found 42.3% of students of Junior High and High School in Cianjur had sexual intercourse. According to their confessions, sex was performed consensual, and some have multiple partners and only 9% economic reasons [15].

Knowledge is power factor for the occurrence of a change in attitude. Knowledge and attitude will be a cornerstone toward the establishment of moral teen so that within an ideally there is harmony between knowledge and attitudes, where attitudes are formed after a process known beforehand. A study in Nigeria entitled knowledge about teen pregnancy, teen sexuality and contraception gets results that almost the entirety of the teenager who researched (85%) had a negative attitude about reproductive health. Lack of knowledge about reproductive health, adolescent pregnancy and contraception caused numerous pregnancy occurring in teenager [16]. A study conducted in 2006 concluded that the lack of knowledge and guidance on reproductive health for adolescents has caused unwanted pregnancy 72,9%, 94.8% of unsafe abortion, 5.2% of abortions in facilities or health workers, 32.2% of sexually transmitted diseases (STDs), 54.3% were infected with HIV and AIDS than 200 thousand people in Indonesia, as well as drug use 78.8% of the 3.2 million drug users in Indonesia [17].

In addition, a study also showed that there are three variables related to premarital sexual behaviour of students, namely the status of residence ($p = 0,040$), exposure to pornography ($p = 0,019$), and the role of peers ($p = 0.001$) [18],[19]. A study in high school indicated that students were less correct in describing the meaning of sexuality. Adolescents tend to understand that sexuality is sexual intercourse between men and women. Some teenage sexual behaviour conducted among them holding hands, hugs, kisses on the cheeks, kissing lips, hickey, even "grepe" (oral sex). The lack of information on sexuality and reproductive health among adolescents brought the teens to risky behaviour [20].

In addition, research in central Java indicated the general patterns of risks to sexual and reproductive health of adolescents is relatively low compared with other countries. It was partly related to the character of culture in central Java were positive and confidence. Confidence is the most powerful factor of influence on adolescent sexual behaviour [21]. Based on this, adolescents or students should be given a positive activity to avoid the deviant behaviour. It is recommended to the school to conduct religious lectures related to reproductive health periodically and improve religious and extracurricular activities.

Adolescent reproductive health conditions are very important to encourage the Indonesian government establish adolescent reproductive health information centre (PIK-R) into a national program in 2000. In addition, the scope broad Puskesmas, i.e 30000 inhabitants duty to ensure the health status of the local community are in the optimal level. Wirobrajan sub-district was in one of the major cities in Indonesia, Yogyakarta. The number of teenagers in the Wirobrajan around 4237 people, and percentage of adolescents in school approximately 99.07% and approximately 0.93% did not attend school.

2. RESEARCH METHOD

The type of research was quasi experiment. The population in this study was all adolescents aged 9-18 years in the Wirobrajan sub district. Sampling technique used accidental sampling and obtained a large sample of 37 adolescents. To see the influence of counselling about reproductive health adolescents then teenager were given a questionnaire before and after the counselling about reproductive health. Time measurement of the effect of education on reproductive health, is calculated after a two-month extension was given. Variables research were the knowledge and attitude of adolescents on reproductive health. After the data is collected, then analysed by paired t test using Stata software version 13.1

3. RESULTS AND ANALYSIS

Wirobrajan is one of the districts in the city of Yogyakarta, Yogyakarta Special Region. Geographically the District Wirobrajan located in the center of Yogyakarta precisely in the north bordering the District of Tegalrejo, east by three Districts of the District Gedongtengen, District Mantrijeron, and District Ngampilan, south by Kasihan Bantul, and the west bordering the two districts namely Kasihan Bantul District and Tegalrejo. The number of teenagers in the Wirobrajan around 4237 people, and percentage of adolescents in school approximately 99.07% and approximately 0.93% did not attend school

Besides having potential as a central point of cultural arts development, in Wirobrajan there were a group of adolescent reproductive health care, namely PIK R and Posyandu, but is not supported by sufficient funding so that its activity should seek their own independently. Supervision and oversight was still lacking, whereas the behaviour of teenagers with the many advances of information technology allows adolescents wrong in choosing friends. Wrong in taking decisions that would result in risky behaviours, such as sexual behaviour before marriage, early pregnancy, abortion, drinking, and drug users.

Table 1. The characteristics of repondents

Factor	N	Percentage (%)
Level of education		
a. Junior high school	18	48.6
b. Senior high school	19	51.4
Age		
Mean : 16.70; Standard Deviation : 3.936		
Health information resources		
a. Print media	17	45.9
b. Electronic media	19	51.3
c. Internet	26	70.2
d. Mobile phone	6	16.2
e. Health Extension Worker	14	37.8
f. Teacher	24	64.8
g. Family	19	51.3
Information is ever obtained		
a. HIV	3	8.1
b. Reproduction health	20	54.1
c. Contraception	3	8.1
d. Drugs	5	13.5
e. Beauty	3	8.1
f. Internal disease	3	8.1
Status of close friends (boyfriend / or girl friend)		
a. Yes	28	75.7
b. No	9	24.3
Age when dating		
a. never dating	8	21.6
b. 9 years old	1	2.7
c. 10 years old	2	5.4
d. 11 years old	1	2.7
e. 12 years old	5	13.5
f. 13 years old	9	24.3
g. 14 years old	1	2.7
h. 15 years old	1	2.7
i. 16 years old	4	10.8
j. 17 years old	4	10.8
k. 18 years old	1	2.7
Mean, SD: 10,70 + 6,078		
Parent Involvement in Decision Making to Have Friends		
Close		
a. Yes	23	62.2
b. No	14	37.8
Reproductive Health Knowledge		
a. Before Education	Mean, SD : 32.65 + 16.295	
b. After Education	Mean, SD : 42.86 + 17.330	
Reproductive Health Attitudes		
a. Attitude Before Treatment	Median : 6.00, max: 75; min: 28	
b. Attitude After Treatment	Median : 72.00, max:75, min:28	

Source: primary data, 2015

Table 2. Effect of counseling on the level of knowledge and attitudes

Factors	Bivariate analysis of knowledge and attitude adolescent			
	n	Mean differences	95% CI	PValue
Knowledge	37	10.216	6.622-13.809	.000
Attitude	37	65.417	11.176-61.690	.000

Source: primary data, 2015

The results on Table 2 shows that the average age of the youngest teens who follow counselling was 10.70 years, with a standard deviation of 6.078. Its level of education was high school and junior high. From the research findings can also be seen that teenagers most often got information on reproductive health of the electronic media. Close friends also played a major role in providing information about reproductive health, as seen from the data characteristics of the sample by 75%. The role of parents and teachers in school was very important in bridging misconceptions about reproductive health [22]. From the research data showed the involvement of parents in taking the decision to have a close friend or a girlfriend. The majority of parents (62.2%) knew their children have a close friend or boyfriend, and 37.8% of parents did not know if their children have a close friend or boyfriend.

Results of paired t-test analysis showed that education about reproductive health effect on knowledge about reproductive health (mean difference: 10.216, 95% CI: 6.622 to 13.809) and attitude about reproductive health in adolescents (mean difference: 65.417, 95% CI: 11,176 -61.690). Knowledge of adolescents about reproductive health will be beneficial to equip young people in their correct information about reproductive health, so expect teenagers do not deviate from the norms prevailing in the community. A study revealed that a good knowledge will support the realization of good behaviour too. The higher the knowledge, the more extensive understanding and behaviour of individuals to what it faces, so expected the individual was able to take a decision in any action to be taken [23]. Provides knowledge about the physical changes, psychological and sexual maturity will allow teenagers to understand and overcome the puzzling circumstances. The higher the knowledge about reproductive health, the more positive attitude towards handling well [24].

A true understanding of the function of reproductive organs both in young men and women was very important. For women, a true understanding of their reproductive organs and functions can help identify their reproductive cycle such as menstruation and so on. By recognizing the reproductive organs and their functions, women can recognize, even avoiding reproductive diseases or diseases that were transmitted through sexual intercourse as an STD (sexually transmitted disease), and even HIV or AIDS. For men, know their reproductive organs or partner will be able to grow a true understanding of the reproductive organs and functions of themselves and their partners. Moreover, he may keep away from diseases caused by disorders of reproductive health [10].

Reproductive health disorders in adolescence can occur from the consequences of deviant sexual behaviour [19]. The examples are: unwanted pregnancy or sexually transmitted diseases, infertility or rape. For teenage boys, the biggest risk was exposed to a sexually transmitted disease (STD) that was gonorrhoea, which is it gets spread to the testicles will cause sterility in men, HIV or AIDS.

Moreover, due to the influence of menstruation, the adolescent girls were often exposed to anemia which would interfere with their reproductive health. Reproductive disorders in teenage years are greater if she was married and pregnant in teenage years. Teenage was the age of rapid growth that requires enormous energy. If she is pregnant, the seizure will occur between the body and the foetus [25]. As a result, one or both lose. If the foetus were lost, then the baby will be born prematurely, if the mother loses, he will be malnourished and prone to bleeding during childbirth [10].

Attitude about adolescent reproductive health was very important in order to have a responsible behaviour. A study from Iriani [26] showed which obtained the value $t = 3.661$ and $p = 0.000$, $p < 0.05$, meaning that there was a significant difference of attitudes toward premarital sex among adolescents who were educated and did not given health education on adolescent reproductive. Attitude is enclosed response to the stimulus or object, of a person, the attitude can be regarded as a syndrome or set of symptoms in response to a stimulus or object, which involves the thoughts, feelings, concerns, and other psychiatric symptoms. Teens with a good attitude were more likely to achieve or good behaviour.

The increasing sexual and reproductive behaviour among adolescents lead increasingly vulnerable adolescents are exposed to a wide range of reproductive health problems. They need to get the right information about the reproductive process and the various factors that influence it. The most appropriate person to answer the curiosity of adolescents on reproduction are the people closest to them, that is their parents and teacher. Parents were the people who should be most familiar with their children, what their

needs and how to fulfil it. Parents were instrumental in causing positive values regarding their sexual life, such as the danger of STDs and HIV / AIDS, sex and pregnancy young age [9],[27].

Several studies represented that education both of knowledge and attitude about sex education associated with sexual behaviour in adolescents. Based on these results the parents is expected to increase knowledge about sex education, positive thinking towards sex education, and to provide sex education to adolescents according to their age [11].

Many factors contribute to the facts above, such as, lack of knowledge held adolescents about sexuality (sex, contraception, pregnancy, etc.), often incomplete and misleading knowledge obtained from erroneous sources, for example from peers, porn magazines, adult movies, and myth in society [23].

4. CONCLUSION

Counselling on reproductive health have an impact on adolescent reproductive health. Relevant health authorities have to provide guidance so that young people do not caught up in promiscuity

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