

REPRODUCTIVE HEALTH LITERACY LEVEL AMONG ADOLESCENTS OF SENIOR HIGH SCHOOL IN SEMARANG CITY, INDONESIA

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ABSTRACT

Background: Adolescence was very vulnerable to reproductive health problems, including sexuality (unwanted pregnancy, abortion, sexually transmitted diseases), drug use, and HIV & AIDS. Semarang City teenage dating behavior was almost 50% very risky. Outcome of poor reproductive health behavior was caused by low levels of literacy of adolescent reproductive health. This study aimed to determine reproductive health literacy level of adolescent in senior high schools in Semarang City.

Materials and Methods: This was a descriptive analytic study with cross-sectional methods in 251 students. Primary data was collected by conducting to fill out questionnaires.

Result: The reproductive health literacy level of adolescent in high schools in Semarang City was still at the level of inadequate (33.1%) and problematic (48.2%). Indicators on the dimensions of reproductive health literacy levels showed that the majority of ability to access, understand, assess, and apply the reproductive health information was more than 50% in the inadequate and problematic categories.

Conclusion: The reproductive health literacy level of adolescent in high schools in Semarang City was in the low category. Various efforts are needed to increase the literacy level of adolescent reproductive health, including training and seminars on adolescent reproductive health in schools and increasing reproductive health information through social media.

Keywords: literacy level, reproductive health, adolescent

1.0 Introduction

Teenager was a transition period from childhood to adulthood. This period was very vulnerable to health problems, including adolescent reproductive problems which include sexuality (unwanted pregnancy, abortion, sexually transmitted diseases), drug abuse, and HIV & AIDS (BKKBN, 2014).

Based on the UNICEF report in 2017, there were 590.000 adolescents aged 15-24 in the world who infected with HIV (UNICEF, 2017). In Indonesia, cases of HIV & AIDS in October-December 2017 totaled 14.640 sufferers. Central Java Province ranked 3rd for HIV cases with 1.694 patients and number 1 for AIDS cases with 1,558 patients. In 2017, Semarang City ranked first as a city with the highest number of HIV cases with 530 patients. The main transmission was through heterosexual (22%). The highest cumulative proportion of AIDS cases was reported in the age group of 20-29 years (32.5%). They were infected with the HIV virus from 5-10 years ago or when they were teenagers (Ministry of Health, 2017).

Another fact was teenagers dating behavior in Semarang City in 2013 which showed that almost 50% were very risky, including hugging, kissing, touching the reproductive organs, and having the intention to have sex. Data for KTD (Unwanted Pregnancy) in adolescents from 2013-2015 was recorded as many as 87 cases (PKBI, 2015). Poor sexual behavior of teenagers was directly proportional to the knowledge of reproductive health that was still low. The results of the 2016 PKBI Central Java survey on adolescents in SMA/SMK equivalent in Semarang City and Regency showed that no more than 55% of teenagers were well informed, covering healthy courtship knowledge as much as only 27.84% men and 42.36% women, about puberty as many as 38.14% of men and 55.11% of women, prevention of pregnancy as much as 18.09% of men and 26.52% of women who were able to answer correctly. Women had a higher level of reproductive health knowledge than men. In addition, based on Nurjanah's research (2016), high school teenagers in Semarang City had low levels of health literacy.

Outcome and poor health behavior of adolescents were caused by low literacy levels of adolescent reproductive health. According to Sorensen (2012), a person's health behavior was influenced by the level of health literacy. In the concept of adolescent health literacy, Manganello (2008) also stated that health literacy was one of the human health behavior determinants. Health literacy was the ability to seek, understand, assess, and apply health information to make judgments and decisions in everyday life regarding disease care, disease prevention, and health promotion (Sorensen, 2012).

Reproductive health literacy level was a new idea to measure and know the ability of adolescents in finding, understanding, assessing, and applying reproductive health information based on the components of health care, disease prevention, and health promotion. By improving reproductive health literacy, adolescents were expected to be able to behave healthily by maintaining reproductive organ hygiene, avoid reproductive health problems such as HIV & AIDS, unwanted pregnancy, early marriage, abortion, and dating violence. Based on this background, research on the literacy level of adolescent reproductive health was important to do. This study aimed to determine the literacy level of adolescent reproductive health.

2.0 Materials and Methods

This research is a quantitative descriptive study with the addition of qualitative studies with an indepth- interview on 30 respondents to find out the description of reproductive health education which has an impact on the low level of literacy of adolescent reproductive health. Indept-interview is conducted after all survey data and results are known. Respondents survey in this study were 251 Senior High School (10th-11th grade) student in Semarang City which were selected by simple random sampling technique. The research instrument was questionnaire which contained question about level reproductive health literacy. Analysis of this research data used univariable to describe the literacy level of adolescent reproductive health for Senior High School.

The collected data were the characteristics of respondents (age and gender), and literacy level of adolescent reproductive health. Data were obtained using a questionnaire that was developed by researchers with a health literacy level questionnaire guide by Sorensen (2012). Researchers used closed questions with four answer choices (very easy, easy, difficult, and very difficult). The questionnaire was filled in by the respondent accompanied by the researcher. Before the data collection process, the validity and reliability of the questionnaire were tested on respondents who had the same characteristics. The validity used the person product moment with the results of all valid questions. The reliability used Cronbach Alpha with the results of all questions declared reliable. Validity and reliability was tested using the SPSS application.

3.0 Result

3.1 Characteristic Respondent

From the research that had been conducted, the characteristic data, which includes age, and gender were reviewed below Table 1.

Table 1. Frequency Characteristic Respondent

Characteristics	Respondent	
	N= 251	%
Gender		
Male	13	5.2
Female	238	94.8
Age		
15 yr	35	13.9
16 yr	127	50.6
17 yr	78	31.1
18 yr	11	4.4
Total	251	100

The majority of respondents were female with a percentage of 94.8%. This was because schools in the research location were in great demand by women, in accordance with the department of the school, namely the department of office administration, marketing, accounting, and software engineering. Age of respondents was in the age range of 15-18 years old.

3.2 General Level of Reproductive Health Literacy

Literacy level of adolescent reproductive health could be seen in general and per indicator which included the ability to access, understand, assess, and apply reproductive health information as shown in Table 2.

Table 2. General Level of Adolescent Reproductive Health Literacy

General Level of Reproductive Health Literacy	Respondent	
	N= 251	%
Inadequate	83	33.1
Problematic	121	48.2
Sufficient	44	17.5
Excellent	3	1.2
Total	251	100

Table 1 showed that the literacy level of adolescent reproductive health was generally in the inadequate category with 33.1% and problematic with 48.2%. While the sufficient and excellent levels were less than 20%.

3.3 Dimension Level of Reproductive Health Literacy

Table 3. Dimensions Indicator of Adolescent Reproductive Health Literacy

Dimension Level of Reproductive Health Literacy	Level			
	Inadequate	Problematic	Sufficient	Excellent
Finding Reproductive Health Information	63 (25.1%)	125 (49.8%)	57 (22.7%)	6 (2.4%)
Understanding Reproductive Health Information	81 (32.3%)	126 (50.2%)	42 (16.7%)	2 (0.8%)
Judging Reproductive Health Information	67 (26.7%)	103 (41.0%)	72 (28.7%)	9 (3.6%)
Applying Reproductive Health Information	81 (32.3%)	124 (49.4%)	41 (16.3%)	5 (2.0%)

Table 2 showed that indicators of reproductive health literacy dimensions which included the ability to search, understand, assess, and apply reproductive health information with a majority of more than 50% were still at the inadequate and problematic level. The ability to search for information was at the inadequate level with 25.1% and problematic with 48.8%. The ability to understand information was at the inadequate level with 32.3% and

problematic with 50.2%. The ability to assess information was at the inadequate level with 26.7% and is problematic with 41.2%. Applying information was at the inadequate level with 32.3% and problematic with 49.4%.

3.3 Overview of Students in Obtaining Reproductive Health Education

3.3.1 Sources of Information Reproductive Health

This shows that the source of information on adolescent reproductive health is still very limited, seeing the results of in-depth interviews with 30 students stated that so far they only get reproductive health education through schools which are conducted once a month. In addition they only get information from books, WEB and social media but they are difficult in assessing the truth of the information. So far, cross-sectoral support (Puskemas) is still very low, within a period of 1 year (Puskemas) only conduct 1-2 times education. Besides that, the support of other factors that become obstacles is a cultural problem, adolescents still think that reproductive health education is taboo. This can be known from the results of interviews with students :

“ Yes, all this time searching for and obtaining reproductive health information from books that are in school, can get guidebooks from schools, but yes it is too theoretical, can't understand“ (R1).

“ From books and the Web on the internet. Teacher counseling also exists. "Health centers have so far rarely given counseling, how many times have they been? Forgot for a long time“ (R2)

“ Teacher counseling, once a month and sometimes read by yourself from books or the Web“. (R16)

“ 1 or 2 times the Puskemas conduct reproductive health education“ (R7)

“ From books and counseling by teachers once a month“ (R4,R17)

“ Ever searched for and obtained reproductive health information from social media but feared hoax news“ (R8).

“From social media Fear of information hoaxes“ (R10,R11)

“It's a bit difficult too ... if you want to find reproductive health information, don't know the account or web is a valid source of information“ (R10)

“Shame when talking about reproductive health with friends or parents“ (R12)

“My parents said it was taboo, tomorrow you know it yourself“ (R18)

3.3.2 Material Reproductive Health Education

In relation to adolescent reproductive health education material stated that they always get material about HIV & AIDS, they have obtained the material very often and the material they get is too theoretical. The educational method used is less attractive, because it uses a one-way communication method. Teenagers want material such as how to maintain the cleanliness of reproductive organs, appearance, avoid invitations to sexual intercourse, how to sort out social friends, in essence more on more applicable material in everyday life. This can be known from the results of interviews with students :

“ So far, often getting HIV & AIDS material, ranging from prevention, symptoms, transmission and treatment ”(R2)“ (R2)

“ HIV & AIDS material most often, even though we want material from others too, like healthy dating, how to choose relationships, how to look and maintain the cleanliness of the reproductive organs“ (R6)

“ The delivery method is not interesting, the speakers talk more, we are rarely given time to talk“ (R4)

“Tired of counseling or education on reproductive health education, no games or ice breaking“ (R10)

3.4 Validity and Reliability

3.4.1 Validity (R Table 0.355) and Reliability (R 0.6)

The results of the validity and reliability test showed that the questionnaire is valid and reliable as shown in Table 4 below.

Table 4: Validity and Reliability

Item	Validity (Value R)	Cronbach's Alpha (Reliability)	Item	Validity (Value R)	Cronbach's Alpha (Reliability)
RHL1	0,515	0.933	RHL32	0.515	0.933
RHL2	0.502	0.933	RHL33	0.502	0.933
RHL3	0.516	0.932	RHL34	0.516	0.932
RHL4	0.533	0.933	RHL35	0.533	0.933
RHL5	0.643	0.932	RHL36	0.643	0.932
RHL6	0.638	0.932	RHL37	0.638	0.932
RHL7	0.509	0.933	RHL38	0.509	0.933
RHL8	0.655	0.932	RHL39	0.655	0.932
RHL9	0.744	0.932	RHL40	0.744	0.932
RHL10	0.401	0.934	RHL41	0.401	0.934
RHL11	0.381	0.934	RHL42	0.381	0.934
RHL12	0.420	0.933	RHL43	0.420	0.933
RHL13	0.615	0.932	RHL44	0.615	0.932
RHL14	0.601	0.932	RHL45	0.601	0.932
RHL15	0.420	0.933	RHL46	0.420	0.933
RHL16	0.415	0.934	RHL47	0.415	0.934
RHL17	0.812	0.932			
RHL18	0.628	0.932			
RHL19	0.399	0.933			
RHL20	0.480	0.932			
RHL21	0.497	0.931			
RHL22	0.591	0.933			
RHL23	0.464	0.932			
RHL24	0.443	0.932			
RHL25	0.436	0.934			
RHL26	0.597	0.934			
RHL27	0.584	0.934			
RHL28	0.414	0.933			
RHL29	0.566	0.933			
RHL30	0.427	0.933			
RHL31	0.463	0.934			

4.0 Discussion

Reproductive health literacy was the ability of adolescents to access, understand, assess, and apply information on adolescent reproductive health in their daily lives. Table 1 shows the general level of literacy of adolescent reproductive health in high schools in Semarang City, the majority of which were still inadequate and problematic. Based on the results of almost the same research, the level of public health literacy of adolescents in Semarang City was still at a low level (Nurjanah, 2016).

A more detailed explanation of the results related to the level of health literacy was in Table 2 which showed that the ability of adolescents to access or search for reproductive health information was still very low, namely at 25.1% and problematic inadequate levels with 49.8%. This showed that students were less able to find or obtain valid and guaranteed truthful health information sources. Based on the results of in-depth interviews with 30 students, they found it difficult to find reproductive health information. The source of information they have used so far was a reproductive health manual from schools that was less attractive because there were too many texts and explanations that were poorly understood. In addition, they were also afraid of accessing reproductive health information from social media or websites for fear that the information was a hoax. The low support of adolescent reproductive health services by health institutions (Puskesmas) was also one of the low ability causes to access and search for reproductive health information. This was because reproductive health services by Puskesmas collide at service times or hours that were out of sync with student learning hours at school (Kenti and Helper, 2016).

Teenagers who did not understand reproductive health information were still at the level of inadequate (32.3%) and problematic (50.2%). This showed that adolescents had difficulties in understanding reproductive health material. This low understanding was caused by the lack of access to reproductive health information they got. Based on in-depth interviews, adolescents stated the language in the teacher's manual and method in delivering reproductive health materials was less understood or too theoretical.

Adolescents did not understand the instructions from extension agents or health personnel such as prevention, symptoms, transmission, and treatment related to reproductive health problems, for example: the danger of unsafe abortion, the impact of early marriage, HIV & AIDS, the importance of pap smears, and breast examinations. In addition, adolescents also did not understand what actions should be taken when experiencing medical emergencies when reproductive health problems occur.

The ability to assess reproductive health information was at the inadequate level with 26.7% and problematic with 41.0%. Teenagers have difficulty in assessing health information on social media and the web due to the large amount of hoax information circulating at this time. In addition, teenagers also feel that they have not been able to assess the advantages and disadvantages of obtaining comprehensive reproductive health information.

The ability to apply reproductive health information was at the inadequate level with 32.3% and problematic with 49.4%. This showed that adolescents had not been able to apply reproductive health information. This was natural because the ability of adolescents to access, understand, and assess reproductive health information was also still low. Teenagers found it difficult to find and join a community or youth reproductive health organization. In addition, teenagers had not been able to sort out friends or social environments that were good for them.

A good level of health literacy would have an impact on healthy behaviour so as to empowered the surrounding environment (Sorensen, 2012). Some factors that influenced a person's level of health literacy were economic, cultural, peer support, parents, media use, and school roles (Manganello, 2008). The advancement of one's health literacy would have an impact on the skills and human resources in improving the health of oneself and others (Gazmamarian et al., 2005).

Various studies showed that health literacy was one of the strongest predictors for one's health. A low level of health literacy was associated with a lack of knowledge about preventive, self-care, and treatment health measures. This lack of knowledge varied from knowledge of fever in children to chronic conditions such as hypertension and diabetes. Some examples were asthma patients who did not know how to use an inhaler, diabetic patients were less aware of the symptoms of hypoglycemia, hypertensive patients did not know that weight loss and exercise could help control hypertension, and mothers who did not know how to read a thermometer. Also stated that people who had limited health literacy had unhealthy behaviors, for example more who smoked including during pregnancy, more who did not breastfeed, risky sexual behavior and more who did not routinely come to child health services (Weiss, 2007).

Therefore, by teaching adolescent reproductive health education comprehensively and holistically, adolescents were expected to have good reproductive health literacy so that they were able to maintain their reproductive health and avoid risky sexual behavior that had an impact on HIV & AIDS.

5.0 Conclusion

Reproductive health literacy is an effort to prevent adolescents from premarital sexual behaviour and avoid various reproductive health problems. Reproductive health literacy is the ability of adolescents to access, understand, assess and apply information on adolescent reproductive health. The results of this research showed that the general level of reproductive health literacy is still inadequate and problematic. Likewise, each indicator searches, understands, evaluates and applies reproductive health information level is an inadequate and problematic.

6.0 Recommendation

Based on the concept of Sorensen or Manganello's health literacy, states that one's health literacy is influenced by supporting peers, parents, education and health systems, and social media. Therefore to improve literacy needed by various sectors and education. In addition, it is necessary to improve health education and counseling through social media and Web information and counseling services are more accessible.

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