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Association information sources of reproductive health with sexual behavior of adolescents in Indonesia

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Abstract

30% of female adolescents reported their first sexual intercourse at under the age of 15 years old on the grounds of being forced by their partners and 49% of female adolescents could not reject their partner's invitation. The lack of reproductive health information sources is a continuity issue that affects the health status of adolescents. Those who get reproductive health information from the surrounding environment with the same age group and have similar dating experience may increase the risk of misinformation. This research aims to know correlation between the information sources of reproductive health and sexual behavior of adolescents in Indonesia. This quantitative study used cross sectional approach, using data analysis of Indonesian Adolescent Reproductive Health Survey Year 2012 (10,980 men and 8,902 women). The data analysis used Chi Square. It shown with the value of x2 (30,511) with the significance value (p = 0,000 <0,05) and 95% CI. There is a correlation between the information sources of reproductive health and sexual behavior of adolescents in Indonesia. The assessment of Health Technology Assessment (HTA) on planning of WA Gateway based on Android application as Information Center and Adolescent Counseling can be the formulation of health policy with interactive learning media for adolescents.

Keywords*: information sources, reproductive health, adolescent sexual*

INTRODUCTION

Family Planning Evidence Brief reports that (49%) of 21 million pregnancies are unwanted pregnancies from 15-19 year old girls who perform sexual behavior1. The effects of sexual behavior include the incidence of abortions carried out by adolescent in England and Finland2, early marriage so that teenagers become more precocious3. Sexually transmitted infections (STIS)4. (50%) young women of dropped out school and psychological disorders due to family rejection5. Half of young women in developing countries actively engage in sexual relations including Latin America and the Caribbean (74%), Africa (45%), and Asia (43%)1. Indonesia is one of Southeast Asian State which shows (5,26%) students in Indonesia have relationships like spouse6. Teenagers dating activity of holding hands is the most they do (80%) teenage boys and (72%) teenage girls, kissing behavior (48%) teenage boys and (30%) teenage girls, feeling/ stimulating sensitive body parts (30%) teenage boys and (6%) teenage girls. The reason for teenage boys doing sexual behavior (57,5%) is because of their curiosity and the reasons for teenage girls is to engage in sexual behavior (12,6%) forced by a partner7.

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The lack of information on teenage reproductive health is a continuity problem that affects the status of adolescent reproductive health. Research conducted in Spain, the sources of information on reproductive health related to sexuality and dating issues are obtained through parents (37%), friends (33%), siblings (17%), magazines (14%), internet (13%), teachers (10%) and religious leaders (6%)8. Teenagers who often get reproductive health information from mothers are teenage girls related to menstruation9. One of the obstacles of reproductive health information given by father is the lack of father's experience in talking about sex to teenagers 10.

Sexual behavior events increase after teenagers get information from family because the sex perspective of brothers is preferred by teenagers on the topic of reproductive organs8. Other than that, talking about sexuality is a conversation that is often done by teenagers to friends with the topic of how to have sex with a partner11. The results of the study in Australia reports (40,8%) the teacher observes the most common sexual behavior of students are showing, swiping genitalia themselves, touching women's breasts, drawing genitals, touching the genitals of adults or peers to penetration12.

The Health Profile report shows that only (24%) schools provide curriculum on sexuality. The Ministry of Education in Indonesia has proposed a comprehensive sex education, which consists of reproductive health and a positive outlook on human sexuality. Sex education is integrated into existing school curricula such as biology, social education and religion13. However, this policy has not been effective because Indonesia is the largest Islamic country that has religious restrictions related to sex education.

In addition, the efforts of adolescent health that have been instructed by the President are the existences of Adolescent Health Care Services (AHCS) in 4 Public Health Center. There are 14 provinces (42,4%) that have achieved the 2014 program target of (90%). The numbers of regencies/ cities that have at least 4 health centers (AHCS) in 2014 were 405 districts/ cities. While the number of Public Health Center (AHCS) in 2014 was (2,995) Public Health Center in 33 Provinces in Indonesia. Based on the description, the purpose of this study is to determine the correlation between reproductive health information sources and sexual behavior on adolescents in Indonesia.

RESEARCH METHODS

This research is a quantitative study with a cross sectional approach. The independent variable of this study is the source of reproductive health information and sexual behavior as the dependent variable. Data collection methods in this study use IDHS data (2012). IDHS (2012) uses a three-stage sampling method. The first stage is to select a number of Primary Sampling Units (PSU) from the sample frame (PSU) which is formed for various survey purposes using a Probability Proportional to Size (PPS) household approach. (PSU) is a group of contiguous census blocks that become the task area of the Population Census (PC) team coordinator 2010. The second stage is to choose a census block (PPS) at each (PSU) selected in the first stage. The third stage is to select 25 households in the selected census block systematically from the results of the household update in the selected census block in the second stage.

The numbers of IDHS samples (2012) are 1.840 census blocks, 874 census blocks in urban areas and 966 census blocks in rural areas. With a research population

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of all adolescents and teenagers aged 15-24 in Indonesia, namely 10.890 men and 8.902 women. The inclusion criteria of this study is unmarried adolescents and exclusion criteria, namely the respondents who answered by not knowing, missing, and incomplete data on the questions related to the research variables totaling 1.907 people, so the remaining samples are 15.330 people. Univariate analysis is carried out with descriptive statistics to describe the characteristics of each research variable and bivariate analysis done by Chi-square test technique to determine the correlation of variables with a (95%) confidence level and (p = 0,05).

RESULTS AND DISCUSSION

Table 1. Distribution of frequency variables and characteristics

Variables	Categories	n	%
Sexual behavior	Yes	13.837	90,3
	No	1.493	9,7
Health Information Sources	Health Workers	10.535	68,7
	Non Health Workers	4.795	31,3
Age	Teenagers (15-19 Years old)	9.481	61,8
	Adolescents (20-24 Years old)	5.849	38,2
Gender	Male	8.281	54
	Female	7.049	46
Education	Elementary School	1.184	7,7
	Junior High School	3.114	20,3
	Senior High School	8.000	52,2
	Diploma	718	4,7
	Bachelor	2.314	15,1
Residence	Urban Areas	9.218	60,1
	Village	6.112	39,9
Dating	Yes	10.275	67
	No	5.055	33

Behaviors such as holding hands, kissing, petting, to sexual intercourse that are 13.837 teenagers (90.3%) who have never committed sexual acts 1.493 (9,7%). By these data, the trend found that teenagers who get information on reproductive health from health workers 10.535 (68,7%) have an impact on increasing teenagers' sexual behavior. This is caused by health workers who are still discriminating and stigmatizing teenagers when they experience unwanted pregnancies so that teenagers delay to get reproductive health information. Source of health information is not from health workers but from friends, mothers, fathers, brothers, families, teachers, and religious leaders.

Based on the characteristics, the majority of teenagers aged 15-19 years are 9.481 (61,8%) with a sex distribution of teenage boys more than teenage girls, namely 8.281 teenage boys (54,0%) and 7.049 teenage girls (46,0). Currently the highest level of education of respondents is high school, namely 8.000 respondents (52,2%) and namely who currently study in diploma totaling 718 respondents (4,7%). Based on the area of residence, most of the Indonesian teenagers are in the city area of 9.218 respondents (60,1%) and it is found that most of Indonesian teenagers are dating namely 10.275 teenagers (67,0%). Table 2 bivariate analysis with chi- square test results obtained by calculating x2 value of (30.511) with the value of significance (p = 0,000 <0,05) and (95%) confidence level. These results indicate that there is a correlation

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between sources of reproductive health information with sexual behavior on teenagers. Teenagers who get information on reproductive health from health professionals who conduct sexual behavior are 9.603 respondents (62,7%).

Table 2. Results of correlation between reproductive health information sources and adolescent sexual behavior

Variables	Categories	Sexual Behavior						x2 (95% CI)	*P-value*
		Yes		No		Total			
		N	%	N	%	N	%		
Reproductive Health Information Sources	Health Workers	9.603	62,7	932	6,1	10.535	100	30,511	0
	Non Health Workers	4.234	27,7	561	3,7	4.795	100		

Respondents who get reproductive health information are not from health workers who do not conduct sexual behavior by 4,234 respondents (27,7%). Generally teenagers will be sexually active at the age of 15-19 years. The initiation of sexual activity on teenagers starts from changing sexual partners, not using condoms, being infected by sexually transmitted diseases, and teenage pregnancies. It is assumed that teenagers who engage in early sexual behavior will continue to be risky behavior14. Teenage boys aged 18-19 years are more likely to have sexual relations and teenage girls are more likely to have sexual relations at the age of 15-17 years. Teenage boys are more likely to think about the frequency of dating experiences and teenage girls are more likely to think about dating commitments15.

Teenagers who do not have education to high school have risk factors for sexual behavior and teenagers with high education are more conducive as free sex offenders because they have the opportunity to socialize together with couples who live nearby without parental supervision. Geographical variation in sexual behavior can be seen from the severity of the HIV epidemic which shows that the prevalence in urban areas is higher because in urban. areas teenagers easily access commercial sex workers (CSWs) and localization of prostitution16. Teenagers who are dating have a risk of sexual behavior because usually teenagers meet in a closed place such as a cinema and found some teenage women use the hijab to hide their sexual identity when dating17. Sexuality is a part of teenage development. The level of sexual experience done by teenagers are masturbation, wet kissing, stimulating sensitive body parts, oral sex, sexual intercourse, and inserting genitals into the anus. Early marriage caused by free sex is prone to experiencing divorce than teenagers who get married for their readiness due to the transition of teenagers into parents who are too early3. 1 in every 5 young women who have experienced forced sexual intercourse has twice high risk of getting a sexually transmitted infection such as chlamydia, gonorrhea, syphilis, herpes4.

Sources of information about sexuality and reproductive health are important education given to teenagers by promoting healthy dating relationships and discuss about reproductive health. In addition reproductive health information provided as early as possible can reduce the negative impact of teenagers' sexual behavior. The frequency of low sexual behavior is influenced by the reception of information obtained by teenagers. Teenagers who get information will experience sexual. behavior more slowly. Teenagers who get reproductive health information from the surrounding

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environment in the same age group and have the same dating experience can increase the risk of misinformation18.

The results of this study found that teenagers who received reproductive health information from health workers have an increase of the sexual behavior of teenagers in Indonesia. It is known that the development of the behavior of teenagers in puberty has a sense of curiosity / great curiosity on new things by trying something that is believed to be pleasure and satisfaction without distinguishing negative and positive effects. Theoretically, the increase of testosterone that occurs during puberty is related to the time of initiation of sexual intercourse and the frequency of sexual intercourse among teenage boys. Whereas on teenage girls, the testosterone hormone relates to the increase of interest and sexual activities. This will lead to increased desire for intimacy and sexual relations.

IDHS data (2012) reports that (54%) the main reason for teenage boys having sexual intercourse is curiosity / trial and error and (13%) the reason for a teenage girl is being forced by a partner. When teenagers obtain pornographic reproductive health information from health workers, the neuron system in the brain triggers arousal which causes sexual tension. This is the reason teenagers try sexual intercourse. Every type of stimulation thought to provide satisfaction will increase the level of dopamine transmission in the brain. The effect of dopamine is more or less like morphine. Dopamine has a function of sexual drive. Dopamine will increase when someone gets sexual stimulation and this will cause addiction to repeat the same favorable conditions.
Besides from health workers, reproductive health information sources are obtained from friends, mothers, fathers, brothers, families, teachers, and religious leaders. Teenagers consider talking about sexuality to be a topic that is often discussed with friends with the topic of how to have sex with a partner, where to have sex, and on teenage boys about how to invite partner to have sex11. Teenagers who often get reproductive health information from mothers are teenage girls related to menstruation and keep themselves from dating activities, but this information is rarely given to teenage boys9. Lack of reproductive health communication is when teenagers grow up and the majority of fathers want their children to start a conversation about sex first10.

Sexual behavior events increase after teenagers get information from brothers because the sexual perspective of brothers is preferred by teenagers with the topic of biology of reproductive organ8. In fact, few families become advisers in their lives, especially for reproductive health.

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CONCLUSION

Teenagers and young adults who get reproductive health information from health workers have increased sexual behavior on teenagers. Submission of good communication with reproductive health topics and paying attention to the privacy of a teenager can be a solution to improve communication to teenagers. There is a correlation between sources of reproductive health information and teenagers' sexual behavior in Indonesia. One of the roles of the teacher as an educator is to provide school-based reproductive health education information, with the aim of overcoming student . Sources of information about sexuality can be conveyed through religious leaders about positive marriage messages, delaying the age of marriage, sexual relations after marriage, and other aspects of reproductive biology. So it is necessary to have an agent who provide a comprehensive reproductive health information resources by having technical competence in providing special services to teenagers, having interpersonal communication skills and counseling and providing sufficient information and support until teenagers can decide on the right choice to overcome the problem or meet their needs.

REFERENCES

Arik V.Marcell, G. R. B. (2017) .Sexual and Reproductive Health Care Services in the Pediatric Setting. *American Academy Of Pediatrics.* doi: https://doi.org/10.1542/peds.2-17-2858.

Cheong, J. I. et al. (2015). The effect of early menarche on the sexual behaviors of Korean female adolescents. *Annals of Pediatric Endocrinology & Metabolism,* 20(3), p. 130. doi: 10.6065/apem.2015.20.3.130.

Elena Regushevskaya, Tatiana Dubikaytis, Made Laanpere, Minna Nikula, Olga Kuznetsova, Elina Haavio-Mannila, Hele Karro, E. H. (2009) .Risk factors for induced abortions in St Petersburg, Estonia and Finland. Results from surveys among women of reproductive age Elena. *The European Journal of Contraception and Reproductive Health Care*, pp. 176–186. doi: 10.1080/13625180902916038.

Heidi A. Lyons, Wendy D. Manning, Monica A. Longmore, P. C. G. (2015). Gender and Casual Sexual Activity From Adolescence to Emerging Adulthood: Social and Life Course Correlates. *The Journal Of Sex Research.* doi: 10.1080/00224499.2014.906032.

Kathryn A. Brookmeyer, Oscar Beltran, N. A. (2017). Understanding the Effects of Forced Sex on Sexually Transmitted Disease Acquisition and Sexually Transmitted Disease Care: Findings From the National Survey of Family Growth (2011–2013) Title. *American Sexually Transmitted Diseases*. doi: 10.1097/OLQ.0000000000000651.

Kementerian Kesehatan (2014) Infodatin Pusat Data dan Informasi Kementerian Kesehatan RI.

Laura Widman, Sophia Choukas-Bradley, Seth M. Noar, Jacqueline Nesi, K. G. (2016) . Parent- Adolescent Sexual Communication andAdolescent Safer Sex Behavior A Meta-Analysis. *American Medical Association*. doi: 10.1001/jamapediatrics.2015.2731.

ISSN : 2685-8673 (online)

Lesley-Anne Ey, E. M. and To (2017). Educators' Observations of Children's Display of Problematic Sexual Behaviors in Educational Settings. *Journal Of Child Sexual Abuse*. doi: 10.1080/10538712.2017.1349855.

Measure DHS. (2012). Survei Demografi dan Kesehatan Indonesia 2012 Kesehatan Reproduksi Remaja.

Miguel Ruiz-Canela, Cristina Lopez-del Burgo, Silvia Carlos, Maria Calatrava, Alfonso Osorio, y J. de I. (2013). Familia, amigos y otras fuentes de información asociadas al inicio de las relaciones sexuales en adolescentes de El Salvador. *Rev Panam Salud Publica*, pp. 54–61.

Planning, F. (2016). Reducing early and unintended pregnancies among adolescents. Family Planning, pp. 1–4.

Satoko Tsuda, Sri Hartini, Elsi Dwi Hapsari, S. T. (2017) . Sex Education in Children and Adolescents With Disabilities in Yogyakarta, Indonesia From a Teachers' Gender Perspective. *Sagepub*. doi: i.org/10.1177/1010539517702716.

Schenita D. Randolph, Tanya Coakley, Jeffrey Shears, R. J. T. J. (2017) . African-American Fathers' Perspectives on Facilitators and Barriers to Father–Son Sexual Health Communication. *Research In Nursing & Health.* doi: 10.1002/nur.21789.

Takele Gezahegn, Zewdie Birhanu, Mamusha Aman, Muluken Dessalegn, Asmamaw Abera, J. N. (2016) .Peer communication on sex and sexual health among youths: a case of Debre Berhan university, Ethiopia. *Medical Journal.* doi: 10.11604/pamj.supp.2016.25.2.9631.

Terence P. Thornberry, Marvin D. Krohn, Megan Bears Augustyn, Molly Buchanan, S. J. G. (2015). The impact of adolescent risk behavior on partner relationships. *Elsevier*, p. 16.

Wendy Heywood, Kent Patrick, Anthony M.A.Smith, M. K. (2014). Associations Between Early First Sexual Intercourse and Later Sexual and Reproductive Outcomes: A Systematic Review of Population- Based Data. *Australian Research Centre in Sex, Health & Society.* doi: 10.1007/s10508-014-0374-3.

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