



The Utilization of Sexual and Reproductive Health Services Among Young Males in Indonesia: Does Their Knowledge of Reproductive Health Matter?

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ABSTRACT

Ensuring the availability of sexual and reproductive health services for adolescents is essential to provide accurate sexual and reproductive health-related information in order to decrease the prevalence of early marriage and premarital sex as well as its outcomes. This study aims to examine the association of reproductive health knowledge and other factors among young males in Indonesia with the use of sexual and reproductive health services. The unit analysis used was 12,612 never-married men aged 15–24. Among respondents, 45% of them had poor knowledge of reproductive health, and 90.4% respondents used the services poorly. Using binomial logistic regression, this study finds that those who had good knowledge of reproductive health, were from a younger age group, had higher education level, were exposed to newspapers, magazines, and the internet, and had a discussion about reproductive health utilized the services better than their counterparts. Providing adolescent-friendly services with both providers and comfortable places in schools, primary health care, and community-based services and also increasing the involvement of teachers, health providers, and religious or community leaders in the services are expected to make the services more accessible for young males and raise their awareness about sexual and reproductive health matters.

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Kata kunci:

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ABSTRAK

Memastikan ketersediaan layanan kesehatan seksual dan reproduksi bagi remaja sangat penting untuk menjamin ketersediaan informasi terkait kesehatan seksual dan reproduksi yang akurat, sehingga prevalensi pernikahan dini dan seks pranikah beserta konsekuensinya, dapat diturunkan. Penelitian ini bertujuan untuk mengetahui hubungan antara pengetahuan kesehatan reproduksi dan factor-faktor lainnya pada remaja laki-laki di Indonesia dengan pemanfaatan pelayanan kesehatan reproduksi dan seksual. Unit analisis yang digunakan dalam penelitian ini adalah 12.612 remaja pria belum menikah, berumur 15-24 tahun. Analisis deskriptif menunjukkan bahwa 45% responden masih memiliki pengetahuan kesehatan reproduksi yang rendah, dan sebanyak 90.4% responden masih belum memanfaatkan layanan kesehatan seksual dan reproduksi secara baik. Dengan menggunakan regresi logistik binomial, hasil penelitian ini menunjukkan bahwa remaja pria yang memiliki pengetahuan kesehatan reproduksi baik, berasal dari kelompok usia yang lebih muda, memiliki tingkat pendidikan yang tinggi, terpapar koran, majalah, dan internet, dan berdiskusi tentang kesehatan reproduksi cenderung memanfaatkan layanan dengan lebih baik. Menyediakan pelayanan kesehatan seksual dan reproduksi yang ramah remaja dengan tenaga kesehatan dan tempat yang nyaman di sekolah, Puskesmas, dan

layanan berbasis masyarakat lainnya serta meningkatkan keterlibatan guru, tenaga kesehatan, dan tokoh agama atau tokoh masyarakat dalam pelayanan diharapkan menjadikan pusat pelayanan kesehatan seksual dan reproduksi lebih mudah diakses.



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INTRODUCTION

Adolescents' sexual and reproductive health issues remain challenging in Indonesia. The last national survey data disclosed that around 7% of 7.501 young women aged 15–19 had either delivered a baby or were pregnant with the first child (National Population and Family Planning Board et al., 2018). Despite the figure declining by 2.5% compared to the previous data (Statistics Indonesia et al., 2013), it simply indicates that the country still struggles to reduce the prevalence of teenage pregnancy and motherhood. Teenage pregnancy is not solely a problem, it brings several social and health-related consequences. The World Health Organization (WHO) stated that maternal mortality, which is closely associated with early pregnancy and childbearing, is one of the predominant reasons for the death of girls aged 15–19 worldwide (World Health Organization, 2021).

Other than early marriage, early pregnancy and childbearing in Indonesia also resulted from premarital sex. A study in Jakarta, Indonesia, found that after adjusting for underreported data, approximately 23% of adolescent respondents had premarital sex (O'Donnell et al., 2020). As premarital sex in this country is often concealed due to cultural and religious values implemented within most communities, premarital pregnancy, especially among adolescents, is commonly terminated by induced-unsafe abortion (Diarsvitri et al., 2011). Preventing risky behavior by providing adequate knowledge and services related to sexual and reproductive health is necessary since neglecting to intervene in this vulnerable group will raise the likelihood of unwanted pregnancy, unsafe abortion, and maternal death in turn.

In addition, teenage pregnancy also raises the chance of deficiency of important nutrients intake including iron because of increased demand in the girls' body during pregnancy (World Health Organization, 2011). It impacts maternal and infant health subsequently. Globally, iron deficiency or anemia is the second dominant cause of adolescents' death and disability in 2019 (World Health Organization, 2021). Nevertheless, iron is also important for boys. Insufficient iron intake leads to anemia and may impair their growth. Thus, increasing knowledge about it is important for both female and male adolescents.

Ensuring the availability of sexual and reproductive health services for adolescents, in particular, is essential to provide accurate sexual and reproductive health-related information in order to decrease the prevalence of early marriage and premarital sex as well as the outcomes. To date, actually, the government has provided services ranging from information and counseling centers (school and community-based) to physical check-ups and treatments (provided at primary health care). These are widely known as the Adolescent Information and Counseling Center (AICC) and the Adolescent Friendly Reproductive Health Services (AFRHS). Moreover, there have been some informal forums in the community which accommodate the adolescents'

needs for sexual and reproductive health services and are integrated with the existing services. However, the utilization of these services in various areas of Indonesia was still poor (Anisah, 2020; Friskarini & Manalu, 2016). Research among senior high school students in Makassar City, Indonesia revealed that sexual and reproductive health services were only used by less than a quarter of respondents (Violita & Hadi, 2019). Contrarily, knowledge of safe sex was considerably low among adolescents who had been exposed to premarital sex (O'Donnell et al., 2020). While those previous studies were conducted in the big cities of Indonesia, where sexual and reproductive health services are more accessible, the findings implied disappointing conditions. It is clear that there is still a lot to do to overcome adolescent-related issues in Indonesia. Moreover, this suggests the necessity of the improvement of the utilization of sexual and reproductive health services among adolescents. Misleading and false information related to sexual and reproductive health could be prevented if the sexual and reproductive health services are well utilized. The services will only also provide the right treatments for adolescents in need. The availability of sexual and reproductive health services will promote positive attitudes toward sexual and reproductive health matters (Susanto et al., 2016).

Age, education level, parents' role in the discussion about sexual and reproductive health, knowledge of reproductive health, as well as knowledge of available services were found to significantly influence the use of sexual and reproductive health services (Abajobir & Seme, 2014; Arifah et al., 2020; Feleke et al., 2013; Hall et al., 2012; Odo et al., 2018; Violita & Hadi, 2019). There have been some studies assessing the utilization of sexual and reproductive health services in Indonesia, however, most of them were small-scale studies located in some schools or community health centers (Arifah et al., 2020; Kurniasih, 2018; Violita & Hadi, 2019). Given that poor utilization of sexual and reproductive health services among adolescents appears to be the same across different regions, the question of whether the problem is also a national issue arises. Therefore, this current study is expected to confirm the use of sexual and reproductive health services in the broader coverage, which is at the national level. Young males become the point of interest in this study since their participation in reproductive health services is quite questionable and is supposed to be involved actively. A study showed that females are more active to seek reproductive health care than males (Khanal, 2016). Moreover, the misconception that reproductive health is exclusively only for females, influences males' awareness in their contribution to taking a role in reproductive health issues (Kabagenyi et al., 2014). Considering Andersen's behavioral model which explains that the perceptions of the need for and utilization of health services are affected by someone's attitude, values, and knowledge toward health and health services, also known as health beliefs (R. M. Andersen, 1995), this study aims to examine knowledge of reproductive health among young males in Indonesia and

whether the knowledge influences their behavior regarding the use of sexual and reproductive health services. Furthermore, the study will also assess what are the other factors that affect their behavior. It is expected that the study will provide useful insights for policymakers to develop more effective interventions to reduce the prevalence of early marriage and premarital sex through the optimal utilization of sexual and reproductive health services, especially among young males.

METHOD

Data source and sample

This study used data drawn from the never-married males' questionnaire of the 2017 Indonesia Demographic and Health Survey (IDHS). The survey had national coverage and provided estimation data at national and provincial levels. The survey was also designed as a household-based survey, employing a two-stage stratified sample design. The first stage was selecting several census blocks for systematic probability proportional to size (PPS) sampling in which the census blocks were drawn from the master sampling frame of the 2010 Population Census. The second stage was systematically selecting 25 ordinary households based on the updated household list in every census block. Within all households interviewed successfully, as many as 13,079 never-married men aged 15–24 were successfully interviewed. For the sake of analysis, the sample was adjusted for differences in probability of selection and interview between cases, yielding a weighted sample of 12,612 never-married men aged 15–24 as the unit analysis of this study. Further, this study defined the unit analysis as young males.

Variables

The dependent variable of this study was the behavior in utilizing sexual and reproductive health services. It was classified into two categories, which were good and poor utilization. This variable constituted a compound of two questions about attending sexual and reproductive health community-based meetings and visiting places such as AICC, AFRHS, etc. to obtain sexual and reproductive health information, counseling, medical check-up, family planning, and sexually transmitted and infectious disease treatment, etc. Everyone with at least one "yes" answer to both questions was considered to have good utilization. Contrarily, those who answered "no" to both questions was categorized to have poor utilization.

The independent variables consisted of knowledge about reproductive health, discussion about sexual and reproductive health matters, and socio-demographic characteristics. Knowledge of reproductive health variables was measured based on several reproductive health knowledge-related questions, namely the ideal age for a woman to get married, the ideal age for a man to get married, the number of children to have, the ideal age for a woman to have her first baby, the ideal age for a man to have first baby, anemia, contraceptive method choices, fertile

period, and exposure to pregnancy by having only one sexual intercourse. The correct answers referred to the operational definition of these variables which was presented at Table 1. All correct answers to each question were summed up, and the scores were categorized into two groups. Respondents with a knowledge score five or less, which was less than 50% of total correct answers, were classified as those who with poor knowledge, and vice versa. The discussion variable referred to the question of people who were asked by or to talk to the respondents about sexual and reproductive health matters. The socio-demographic variable comprises respondents' age, place of residence, education level (highest education level that respondents completed), frequency of media exposure (magazine or newspaper), and whether they ever used the internet in the last 12 months before the survey.

Data analysis

Descriptive statistics were used to present the prevalence of the utilization of sexual and reproductive health services and also the respondents' knowledge of sexual and reproductive health. In addition, it was also used to show the percentage distribution of respondents based on socio-demographic characteristics. Binomial logistic regression was employed to examine the association of knowledge about sexual and reproductive health and also the other independent variables with the use of sexual and reproductive health services. All the analysis conducted in this study used IBM SPSS 20.

RESULTS AND DISCUSSION

This study analyzed 12,612 unmarried men consisting of 61.2% of those who were in the 15–19 age group and 38.8% of those who were in the 20–24 age group (Table 2). More than half of the respondents lived in urban areas and had never been exposed to magazines or newspapers. As many as 77.1% young men attended secondary school and 87.4% used the internet within the last 12 months before the interview. More than a quarter of respondents said that they never had discussions about sex or any reproductive health-related topics. According to the people who talked, talking about reproductive health matters with teachers (26.3%) and health providers (24.7%) seemed more popular among young men than talking with friends (14.9%) and parents/family (6.3%).

Table 3 shows that utilizing reproductive health services seemed uncommon among young males. The majority of respondents had poor utilization of the facilities and care related to reproductive health matters (90.4%). The knowledge about reproductive health also indicates a worrying result. Almost half of the respondents still had poor knowledge about reproductive health. Looking at the breakdown of the reproductive health indicators, it is clear that the cause of anemia, contraceptive method choices, and the definition of the fertile period were less conceived by young males. The percentages of the respondents who answered the questions correctly were 10.5%, 37.4%, and 13.1%, respectively.

Table 1
The Operational Definition of Knowledge of Sexual and Reproductive Health

Variables of Knowledge of Sexual and Reproductive Health	Definition	Correct answer
Ideal age at first marriage for woman	Perception of the ideal age for a woman to get married firstly refer to the Indonesian government program (National Population and Family Planning Board, 2020).	21-30 years old
Ideal age at first marriage for man	Perception of the ideal age for a man to get married firstly refer to the Indonesian government program (National Population and Family Planning Board, 2020).	24-35 years old
Number of children to have	The number of children that adolescents to have in the future. The cut of the point is based on Indonesian government program (National Population and Family Planning Board, 2020).	1-3 children
Ideal age for a woman to have first baby	Perception of the ideal age for a woman to have her first baby referred to the safest age for childbearing (A. N. Andersen et al., 2000).	22-35 years old
Ideal age for a man to have first baby	Perception of the ideal age for a man to have his first baby (Klingberg-Allvin et al., 2012).	25-44 years old
Anemia	Perception of the cause of anemia (World Health Organization, 2011).	-Lack of consumptions of meat, fish, vegetables, fruits. -Bleeding
Contraceptive methods	The knowledge of contraceptive method choices. It refers to the eight available modern contraceptive methods provided or promoted by the Indonesian government (female sterilization, male sterilization, Intra-Uterine Devices/IUDs, implant, injection, pill, male condom and Lactational Amenorrhea Method/LAM) (National Population and Family Planning Board, 2020).	At least know five methods
Fertile period	Perception of the time of fertile period (Ozsoy et al., 2012).	Halfway between periods.

Table 2
Characteristics of the Respondents

Characteristics	n (weighted)	%
Age		
15-19	7,713	61.2
20-24	4,899	38.8
Place of residence		
Urban	6,869	54.5
Rural	5,743	45.5
Education level		
Primary or less	1,258	10.0
Secondary	9,727	77.1
Higher	1,627	12.9
Frequency of media (magazines/newspapers) exposure		
At least once a week	1,779	14.1
Less than once a week	4,485	35.6
Not at all	6,348	50.3
Ever used the internet within the last 12 months		
Yes	11,027	87.4
No	1,585	12.6
Having anyone to discuss about sexual matters		
Parent or family	801	6.3
Friend	1,873	14.9
Teacher	3,320	26.3
Health providers	3,120	24.7
Never had discussion	3,498	27.7
Total	12,612	100

The bivariate logistic regression analysis resulted that knowledge about reproductive health, as well as age, place of

residence, education level, frequency of media exposure, internet use, and discussion related to reproductive health matters, were significantly associated with the use of reproductive health services among young males (Table 4). Nevertheless, after controlling all the variables involved, it is confirmed that the respondents' place of residence had no longer contributed to their behavior in utilizing reproductive health services. The adjusted model shows the final model suggesting knowledge about reproductive health, together with respondents' age, education level, frequency of media exposure, internet use, and discussion related to reproductive health matters, influenced the utilization of reproductive health services.

As expected, young males with poor knowledge about reproductive health were 0.75 less likely to utilize reproductive health services. In other words, those who had good knowledge tended to use the services better than their counterparts. Regarding the socio-demographic characteristics, respondents from the younger age group were 0.81 times less likely to utilize reproductive health services than their counterparts. Moreover, education level positively impacted the utilization of reproductive health services. The likelihood of using reproductive health services increased as the education level increased. Similarly, young men who were exposed frequently to magazines or newspapers were more likely to have better behavior toward reproductive health services. Respondents who read magazines or newspapers at least once a week and those who read them less than once a week were 1.65 times and 1.55 times more likely, respectively, to utilize the services than those who had never been exposed to both.

Internet use showed a positive and strong association with the utilization of reproductive health services as well.

Young men who used the internet in the last 12 months before being interviewed were 1.94 more likely to use the services than those who were not. Furthermore, having discussions regarding reproductive health topics with health providers had the greatest effect on the utilization of reproductive health services. The odds of utilization were 3.78 times higher than those who never had discussions. Respondents who talked with parents or family and those who talked with teachers about reproductive health matters were 1.41 times and 1.34 times more likely to have better behavior toward reproductive health services, respectively.

Table 3
The Percentage Distribution of Reproductive Health Services Utilization and Knowledge Among Young Men

Utilization of reproductive health services	n (weighted)	%
Good	1,212	9.6
Poor	11,400	90.4
Total	12,612	100
Knowledge about reproductive health	n (weighted)	%
Poor	5,705	45.2
Good	6,906	54.8
Indicators of knowledge about RH		
Ideal age at first marriage for woman		
Answer correctly	8,817	69.9
False	3,795	30.1
Ideal age at first marriage for man		
Answer correctly	10,422	82.6
False	2,190	17.4
Number of children to have		
≤ 3	10,609	84.1
>3 or don't know	2,001	15.9
Ideal age for a woman to have first baby		
Correct answer	9,609	76.2
False	3,003	23.8
Ideal age for a man to have first baby		
Answer correctly	10,336	82.0
False	2,276	18.0
Anemia		
Answer correctly	1,327	10.5
False	11,285	89.5
Contraceptive methods		
Know ≤ 4 methods	7,896	62.6
Know > 4 methods	4,716	37.4
Fertile period		
Answer correctly	1,646	13.1
False	10,966	86.9
Exposure to pregnancy by having only intercourse once		
Answer correctly	9,614	76.2
False	2,998	23.8
Total	12,612	100

Generally, this current study's findings are in concordance with some previous studies that highlight the poor knowledge of reproductive health and the poor utilization of sexual and reproductive health services among young males. The study identifies almost half of the respondents still had poor knowledge of sexual and

reproductive health which implies similarity to the previous studies that sexual and reproductive health knowledge remains a problem for a part of adolescents in Indonesia, regardless of their sex differences (O'Donnell et al., 2020; Violita & Hadi, 2019). Another study argued that adolescents in the country still did not have comprehensive knowledge of reproductive health (Kurniasih, 2018). It seems in line with this study's result as well. Some topics were better perceived, but some others were not. Lack of comprehensive knowledge appears to be typical among adolescents since this was also the case in the sub-Saharan regions (Finlay et al., 2020). Anemia was one of the reproductive health topics that were understood by only a small proportion of respondents (10.5%). Lack knowledge of anemia also appears prevalent in some developing countries. Many adolescents in South Africa, India, and Malaysia could not identify the causes and the signs of anemia correctly (Govender et al., 2019; Pareek & Hafiz, 2015; Yusoff et al., 2012). On the other hand, anemia-related malnutrition has a number of negative effects and has impacts on both young males and females' future (Shapu et al., 2020). Thus, improving knowledge of anemia through formal and informal education is expected to enhance adolescents' attitudes and practices toward anemia eradication and reduce health impact-related outcomes subsequently.

The other reproductive health topic that should be paid more attention to is the poor knowledge of the fertile period. Lack of knowledge about the fertile period among young males was also found in earlier studies (Ozsoy et al., 2012; Widyastari et al., 2015). This is worrying since the combination of ignorance and exposure to risky sexual behavior increases the probability of experiencing unwanted pregnancy. This issue has to be taken seriously by the government and policymakers as many studies in Indonesia have revealed the same results (Widyastari et al., 2015), and this current study still discloses the regrettable finding, denoting the need for more attention.

Providing contraception among unmarried adolescents has not been the program of the Indonesian government. Given that premarital sex is common, although it is normally hidden because of social and cultural pressures (O'Donnell et al., 2020), providing sufficient knowledge of contraceptive method choices seems to be a better option. Together with knowledge improvement, ensuring contraception availability does not only prevent unwanted pregnancy, but also protects adolescents from experiencing sexually transmitted diseases (Salam et al., 2016). In their study, O'Donnell et al. (2020) found there were only 40% of unmarried-sexually active adolescents who used a condom when they had sex. With only 37.4% respondents who knew more than four contraceptive methods, this current study suggests the importance of improving young males' knowledge about contraceptive method choices. This finding is consistent with some previous studies (Munakampe et al., 2018; Sokkary et al., 2013). Another study that showed good knowledge of contraception highlighted the high knowledge of condoms but poor knowledge of other contraceptive methods, especially long-acting methods (Renjhen et al., 2010).

Table 4
The Logistic Regression Model for the Predictors of Utilization of Reproductive Health Services

Variables	Unadjusted		Adjusted	
	Odds ratio	95% CI	Odds Ratio	95% CI
Knowledge about reproductive health				
Poor	0.51**	0.48 - 0.58	0.75**	0.65 - 0.85
Good	1		1	
Age				
15 – 19	0.63*	0.56 - 0.70	0.81*	0.71 - 0.93
20 – 24	1		1	
Place of residence				
Urban	1.38**	1.22 - 1.55		
Rural	1			
Education level				
Primary or less	0.18**	0.13 - 0.24	0.43**	0.31 - 0.60
Secondary	0.39**	0.34 - 0.45	0.58*	0.49 - 0.68
Higher	1		1	
Frequency of media (magazines/newspapers) exposure				
At least once a week	2.66**	2.26 - 3.12	1.65**	1.39 - 1.96
Less than once a week	1.88**	1.64 - 2.15	1.55**	1.34 - 1.78
Not at all	1		1	
Ever used the internet within the last 12 months				
Yes	3.35**	2.54 - 4.43	1.94**	1.45 - 2.60
No	1		1	
Having anyone to discuss about sexual matters				
Parent or family	1.77**	1.31 - 2.39	1.41*	1.03 - 1.91
Friend	1.47**	1.16 - 1.88	1.23	0.96 - 1.57
Teacher	1.72**	1.40 - 2.11	1.34**	1.09 - 1.65
Health providers	5.10**	4.25 - 6.11	3.78**	3.14 - 4.56
Never had discussion	1		1	

Note:

** significant at $p < 0.01$

* significant at $p < 0.05$

This study finds that the utilization of sexual and reproductive health services among young males was significantly poor, which was only less than ten percent of those who used the services. It confirms previous studies stating that males' involvement in sexual and reproductive health services crucially requires an intervention (Kabagenyi et al., 2014; Khanal, 2016). It was perceived that reproductive health services were intended for girls only (Odo et al., 2018). A qualitative study in Sri Lanka revealed that young males felt neglected as they had not been prioritized equally to receive reproductive health services (Agampodi et al., 2008). Exposing young males to various information about available reproductive health-related services is expected to reduce the gender issue gap in sexual and reproductive health care. In addition, considering the recent finding, the condition is the same as the previous studies in Indonesia that the use of sexual and reproductive health services among adolescents generally remained low, although these were conducted within small-scale settings (Anisah, 2020; Arifah et al., 2020; Friskarini & Manalu, 2016; Violita & Hadi, 2019), and also studies performed elsewhere (Abajobir & Seme, 2014; Annor et al., 2020; Khanal, 2016; Kyilleh et al., 2018).

Among adolescents, visiting sexual and reproductive health services was associated with involvement in risky behaviors (Violita & Hadi, 2019), thus seeking the services was only common among those who need them (Kurniasih, 2018; Marcell et al., 2017). This perception seems to discourage their determination to obtain services. Hall et al. (2012) suggested that adolescents with gynecological issues previously were more likely to utilize sexual and reproductive health services than their counterparts. Fear of stigma related to a bad reputation due to "negative sexual

behaviors" hindered adolescents from seeking sexual and reproductive health care (Kyilleh et al., 2018; Marcell et al., 2017; Sychareun et al., 2018). Confidentiality issues also commonly emerges, influencing the use of services. Judgemental attitudes from providers made adolescents feel uncomfortable, so they tended to hinder interaction with them (Sychareun et al., 2018). Providing adolescents-friendly services with both providers and comfortable places may reduce the reluctance of the adolescents to obtain the services. Delivering interesting communication style also should be considered to attract adolescents and open the discussion of sensitive topics related to reproductive health. Moreover, lack information of the availability of the services may also contribute to low utilization of sexual and reproductive health services, as Arifah et al. (2020) and Violita & Hadi (2019) mentioned in their studies. The absence of promotion of the services has so far continued to be a significant barrier to adolescents' health (Agampodi et al., 2008), so that information about available services will become an important consideration in accessing health services.

Looking at the relationship between young males' knowledge of reproductive health and their behavior toward the use of sexual and reproductive health services, this study emphasizes the importance of reproductive health knowledge on sexual and reproductive health services utilization. This finding supports earlier studies (Abajobir & Seme, 2014; Bersamin et al., 2017; Violita & Hadi, 2019). Knowledge of reproductive health influences the ability to solve sexual and reproductive health-related problems (Agampodi et al., 2008). Having good knowledge of reproductive health is also associated with perceiving the symptoms and consequences of reproductive health

obstruction. As one of the health beliefs components, referring to Andersen's behavioral model, knowledge affects how people respond to their health issues and when they decide to have care or services (R. M. Andersen, 1995). It is clear that good knowledge may increase the awareness of service use (Abajobir & Seme, 2014).

Age is often attributed to someone's dependence and experience. In this study, the pattern of age's influence is similar to the existing studies proving that adolescents from the older age groups had a greater possibility of using the services (Abajobir & Seme, 2014; Hall et al., 2012; Odo et al., 2018). Older adolescents has greater decision-making ability to access sexual and reproductive health services (Odo et al., 2018) as well as greater exposure to the knowledge as they grow older (Abajobir & Seme, 2014). On the other hand, younger adolescents are less likely to access the services since they feel they are not in need (Hall et al., 2012).

In many studies, education has been found to facilitate knowledge improvement. Since in this study, knowledge of reproductive health significantly affected the utilization of sexual and reproductive health services, the effect of education level on service use is expected. Educated adolescents tend to have more knowledge about services available and preventive health care advantages as well as to be more accepting of new health-related information (Feleke et al., 2013). Those who attain higher education level are more likely to perceive what best suit their problems and are more convinced in obtaining the services (Odo et al., 2018).

Based on the behavioral model, the media constitute the instruments that enable someone to identify the available services and how to reach them (R. M. Andersen, 1995). In this study, media exposure was separated between exposure to any newspapers or magazines and exposure to the internet. The finding reveals that the possibility of service utilization increased as the frequency of exposure to the newspapers or magazines rose, indicating that high media exposure correlates with good service utilization. It confirms an existing study that media exposure contributed to utilization of sexual and reproductive health services (Zaw et al., 2012). Moreover, internet exposure within 12 months before the data collection also showed a positive effect on service utilization. The internet has become one of the main information sources for adolescents, following friends and parents to obtain any kind of reproductive health-related information (Kurniasih, 2018). Adolescents who actively use the internet may have broader knowledge and a wish to get more information, so they tend to enthusiastically receive new information and care in need, including the sexual and reproductive health services. Thus, the media, including the internet, significantly contribute to promoting sexual and reproductive health services (Zaw et al., 2012).

Discussion is important for adolescents to enhance their knowledge of sexual and reproductive health as well as encourage them to seek information and care. Considering the data resulting from the descriptive analysis, teachers were predominantly people that young males preferred to talk with to discuss reproductive health matters. This is in line with a previous study (Widyastari et al., 2015). However, associating it with the use of sexual and reproductive health services, this current study found that health providers strongly influenced young males' behavior in reproductive health services seeking. The possible reasons are that young males felt more comfortable asking or talking with other people who they assumed capable and less judgemental. Thus, visiting sexual and reproductive health centers became preferable among young males. Having a discussion with same-sex health providers was also preferred by most

respondents of a study carried out in Ethiopia (Abajobir & Seme, 2014). A qualitative study also revealed that young males were more likely to have personal communication and receive credible information related to reproductive health (Marcell et al., 2017). Having a discussion with parents or family, as well as with teachers also found to significantly affect the use of services, although the odds were not as big as having a discussion with health providers or religious leaders. Unlike found in the prior study, which found young males preferred asking and talking with friends and teachers about reproductive health issues (Kurniasih, 2018), this current study failed to prove the correlation between having a discussion with friends and utilization of services. It may imply that talking and asking about reproductive health matters with those who are capable or experienced contributes to encourage young males to use the services more.

LIMITATION OF THE STUDY

Since this study employed a cross-sectional secondary data, this study only possible analyzed limited variables and indicators, especially related to the utilization of sexual and reproductive health. In addition, in constructing the variable of knowledge of reproductive health, this study only used some questions of the available reproductive health knowledge indicators in IDHS 2017. Future studies will be more full of insights if they also consider broader indicators of knowledge, including sexual and other reproductive health-related variables.

CONCLUSIONS AND SUGGESTIONS

The knowledge of reproductive health among Indonesian young males was poor and apparently incomprehensive. Similarly, the utilization of sexual and reproductive health services also showed unsatisfactory condition. This current study confirmed the findings of several prior studies that the knowledge of reproductive health was found to significantly affect the use of sexual and reproductive health services. Having a discussion about reproductive health with health providers constituted the strongest factor that was associated with the service use. Moreover, young males who were from the older age group (20–24), had higher education, were exposed to newspapers or magazines, and had ever used the internet within 12 months prior to data collection, were more likely to utilize the services better than their counterparts.

Providing adolescent-friendly services with both providers and comfortable places in schools, primary health care, and community-based services and also increasing the involvement of teachers, health providers, and religious or community leaders in the services is expected to make the services more accessible for young males and raise their awareness about sexual and reproductive health matters. Giving those who are involved in the services comprehensive and well-structured sexual and reproductive health-related training regularly as well as educating them about adolescents' reproductive health rights will ensure young males who visit the services get accurate and credible information and equal services. In addition, since most young males are well-exposed to the media including newspapers, magazines, and the internet, involving social media influencers and celebrities in the promotion of

adolescent-friendly sexual and reproductive health services may encourage young males to be more welcome and aware of the importance of gathering knowledge from the right sources. Finally, extending the publicity of reproductive health knowledge as well as the services available is also crucial as it will increase the knowledge and services' exposure.

ETHICAL CONSIDERATIONS

The data was obtained from the website of Demographic and Health Survey (DHS) (<https://dhsprogram.com>), by registering. As the rule of confidentiality, the respondents' names and addresses were not provided in the dataset. Thus, this study does not require ethical approval for involving information available in public domain.

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