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FACTORS THAT ASSOCIATED WITH REPRODUCTIVE HEALTH KNOWLEDGE AMONG ADOLESCENTS DURING COVID-19 PANDEMIC IN DKI JAKARTA.

Faktor-faktor yang Berhubungan dengan Pengetahuan Kesehatan Reproduksi pada Remaja Selama Pandemi Covid-19 di DKI Jakarta

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ABSTRACT

Background*: Covid-19 was bring many effects to adolescent group. According to the data of the report of the visit of Youth Care Health Service (YCHS) in DKI Jakarta in 2020 reflect that the reproductive health condition of adolescents is still bad during the Covid-19 pandemic. Adolescent's lack of knowledge about reproductive health is one of the main predictors of existing reproductive health problems.* ***Purpose****: This study aimed to determine the strongest factors associated with reproductive health knowledge among adolescents in DKI Jakarta during the Covid-19 pandemic.* ***Methods****: The study used a quantitative method with online based study and a cross-sectional as a design study. Respondents were calculated with Accidental Sampling and obtained 400 respondents. The chi square test and multiple logistic regression test was undertaken to analyze data with α = 0,05.* ***Results****: The results of univariat test obtained 87,3% respondents have good reproductive health knowledge. Chi Square test obtained that the significant value of the reproductive health knowledge with gander, education level, media information, and peer influence. Based on Multiple Logistic Regression test, adolescents male had a 5,629 probability to having less knowledge of reproductive health (95% CI 2,95-11,757) compared to aldolescents girls after being controlled by the level of education and peer influence.* ***Conclusion****: There was a correlation between reproductive health knowledge with gender, education level, and peer influence among adolescents during Covid-19 pandemic in DKI Jakarta.*

Keywords: *adolescent, knowledge, reproductive health*

ABSTRAK

Latar Belakang: Pandemi Covid-19 membawa dampak bagi remaja. Berdasarkan laporan kunjungan Pelayanan Kesehatan Peduli Remaja (PKPR) wilayah DKI Jakarta tahun 2020 disebutkan bahwa kondisi kesehatan reproduksi remaja masih menghawatirkan selama masa pandemi Covid-19. Kurangnya pengetahuan remaja tentang kesehatan reproduksi menjadi salah satu prediktor utama masalah kesehatan reproduksi yang ada. **Tujuan:** Tujuan penelitian untuk mengetahui faktor yang berhubungan dengan pengetahuan remaja tentang kesehatan reproduksi pada masa pandemi Covid-19 di DKI Jakarta. **Metode:** Penelitian menggunakan metode analitik berbasis online dengan desain study cross-sectional. Pengumpulan data menggunakan accidental sampling dan diperoleh 400 responden. Analisis data menggunakan uji chi square dan regresi logistik berganda dengan α = 0,05. **Hasil:** Hasil analisis univariat menggambarkan sebagian besar remaja memiliki pengetahuan kesehatan reproduksi yang baik (87,3%). Hasil uji *Chi Square* diperoleh ada hubungan antara jenis kelamin, tingkat pendidikan, media informasi, dan pengaruh teman sebaya terhadap pengetahuan kesehatan reproduksi. Berdasarkan hasil uji Regresi Logistik Berganda menunjukkan remaja laki-laki berpeluang 5,629 kali (95%CI: 2,95-11,751) untuk memiliki pengetahuan yang kurang tentang kesehatan reproduksi dibandingkan dengan remaja perempuan setelah dikontrol oleh tingkat pendidikan dan pengaruh teman sebaya. **Kesimpulan:** Terdapat hubungan antara pengetahuan kesehatan reproduksi dengan jenis kelamin, tingkat pendiidkan dan pengaruh teman sebaya pada remaja selaa pandemic Covid-19 di DKI Jakarta

Kata kunci: kesehatan reproduksi, pengetahuan, remaja

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INTRODUCTION

The National Population and Family Planning Agency explained that adolescents are people aged 10-24 years and are single. Covid-19 pandemic that has hit Indonesia has had an impact on every age group, including adolescents. Although adolescents are considered as a group that is less at risk for infection with Covid-19. However, Covid-19 pandemic has had an impact on adolescents from other aspects of life, such as health gaps, education, adolescent psychological well-being, to deviations in adolescent behavior (Addae, 2021). BKKBN also said that some of the impacts of Covid-19 pandemic on adolescent reproductive health include a reduction in adolescent visits to reproductive health services, an increased risk of unwanted pregnancies, to the existence of gender-based violence as seen in cases of early marriage that are rampant in the pandemic era. This impact can occur during Covid-19 pandemic due to disruptions to reproductive health services and information, adolescents lack formal reproductive health education due to school closures that prevent adolescents from being socially involved with their peers and teachers (BKKBN, 2020).

Meanwhile, in order to support efforts to control Covid-19 in Indonesia, the government provides internet quota subsidies to support the distance learning process (PJJ) for students, the majority of whom are adolescents. This has resulted in an increase in the use of the internet among adolescents such as the results of the 2020 Susenas survey which showed that in the last three months as many as 78% of the entire population of DKI Jakarta aged 5 years and over accessed the internet using laptops, PCs/desktops, tablets, and phones (Badan Pusat Statistik RI, 2020b).

The internet is proven to make it easier for adolescents to access information. However, the internet not only provides positive information, but also provides negative information such as information containing pornographic elements (Rahayu *dkk*., 2017). This condition has the potential to encourage adolescents to increasingly fall into health problems that stem from deviant behavior (Kementrian Kesehatan, 2015). The increase in adolescent free sex behavior during the pandemic in Indonesia can be seen in a report which states that 1 in 20 adolecents have had sexual intercourse (Kementrian Pemberdayaan Perempuan dan Perlindungan Anak, 2020). Adolescents who are dating have carried out risky sexual behavior including 23% of sexual relations, 33% of petting, 77% of kissing, and 92% of holding hands (Konsorsum Psikologi Ilmiah Nusantara, 2020).

The results of a review conducted by the One Vision Alliance organization regarding the situation of Adolescent Sexual and Reproductive Health during the Covid-19 pandemic in ten provinces in Indonesia, one of which was in DKI Jakarta, it was found that 6.74% of adolescents aged 18-24 years old had done premarital sex (Santoso, 2021). Due to promiscuity and free sex, cases of early marriage in adolescents have increased during the pandemic in Karanganyar Regency, Central Java, from 1700 cases in the previous year to 1800 cases in 2020 (Alim, 2020).

Other findings show that unwanted pregnancies experienced by adolescents in Madiun force adolescents to be married early and often lead to abortions (Andina, 2021). Abortions are also happening, although there is no definite data on the number of illegal abortion cases in Indonesia (Rochimawati dan Sumiyati, 2020). However, the number of abortions that occurred on the island of Java in 2018 was estimated at 1.7 million cases. DKI Jakarta Province is the province with the highest abortion rate on the island of Java, namely 68 cases per 1000 population (Tim Peneliti Guttmacher Institute dan FKM UI, 2018). Unsafe abortion can increase the risk of maternal death. Maternal mortality is still a problem that needs serious attention in developing countries, including Indonesia (Naura, Cukarso and Herbawani, 2020).

Not only that, but the prevalence of AIDS in Indonesia also increased during the pandemic to 8,639 AIDS cases found in 2020, while in 2019 the number of AIDS cases was 7,036 cases dominated by the 20-29 year age group (37.8%). Besides that, DKI Jakarta is the fourth region with the highest number of HIV cases in Indonesia, namely 4,391 cases (Kementrian Kesehatan RI, 2020a; Kementrian Kesehatan RI, 2020b).

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According to the results of a preliminary study conducted by researchers at the DKI Jakarta Provincial Health Office, data obtained from the DKI Jakarta Regional District in 2020 which stated that reproductive health problems in adolescents are still a concern. There were 3702 pregnant women, 45 gave birth and 606 had abortions. It was also found that as many as 1422 teenage boys and girls had premarital sex, 311 adolescents experienced Sexually Transmitted Infections (STIs), 200 adolescents were infected with HIV, and 742 adolescents had early marriages (Dinas Kesehatan Provinsi DKI Jakarta, 2021).

Based on this description, adolescent problems still need special and serious attention. Lack of knowledge of adolescents about reproductive health is one of the determining factors because knowledge of reproductive health can limit sexual behavior that is increasingly free among adolescents (Suharti dan Surmiasih, 2016). As the findings of the Ministry of PPPA, that 3 out of 5 adolescents do not know the risk of unwanted pregnancy even though they only had sexual intercourse once during the pandemic (Kementrian Pemberdayaan Perempuan dan Perlindungan Anak, 2020). Knowledge is closely related to one's actions (Andani, 2021). Until now, no research has been found on adolescent knowledge about reproductive health with a coverage area of one province and in special conditions such as a pandemic.

The purpose of this study was to determine the factors related to adolescent knowledge about reproductive health during the Covid-19 pandemic in DKI Jakarta.

METHOD

This research method was quantitative analytic with a cross-sectional research design using primary data collected online using Accidental Sampling data collection techniques. The study population included adolescents aged 18-24 years who live in DKI Jakarta. The research sample obtained was 400 respondents who had met the inclusion criteria, namely the sample in this study were respondents aged 18-24 years, unmarried, domiciled in DKI Jakarta since January 2020 until the research took place, owned a smartphone, and was willing to be a respondent. The instruments used in the study were electronic questionnaires, phones or smartphones, stationery, and laptops. Electronic questionnaires in the form of google forms were distributed through existing social media. Data collected were analyzed using univariate analysis to determine the description of each variable studied, bivariate analysis to determine the relationship between the dependent variable (reproductive health knowledge) and the independent variables (age, gender, education level, role of educational institutions, information media, and the influence of peers), and multivariate analysis to determine the variables most related to reproductive health knowledge.

This research has received approval from the Health Research Ethics Commission of the National Veterans Development University Jakarta under Number 388/VII/2021/KEPK.

RESULTS

Characteristics of Respondents

The distribution and frequency based on the demographic characteristics of research respondents can be seen in table 1, the results showed that the age variable explains that there are more adolescents aged 22-24 years (58.5%) than adolescents aged 18-21 years. The number of female respondents (55.3%) was more dominant than the number of male respondents. Most of the adolescent respondents had a high educational background (85.5%) and their main activity during the pandemic was mostly school or college (72.3%). In the domicile variable, respondents who lived in South Jakarta (30.5%) dominate more than respondents who lived in other administrative areas of Jakarta. Most of the respondents came from families with sufficient income or UMP DKI Jakarta (57.7%).

Respondent's Reproductive Health Knowledge

The results of the univariate analysis shown in table 2 illustrate that most of the respondents have good knowledge of reproductive health (87.3%).

Relationship between Age and Knowledge of Reproductive Health

From table 2, it was known that knowledge of reproductive health in adolescent

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respondents aged 18-21 years has less knowledge of reproductive health by 11.4%. The results of statistical tests obtained p value of 0.612 thus it can be said that there is no relationship between age and knowledge of reproductive health in adolescents.

Relationship between Sex and Knowledge of Reproductive Health

Table 2 showed that 22.3% of male respondents have less knowledge of reproductive health. From the statistical test conducted, it was obtained that the p value was equal to 0.000 thus it was said that there was a relationship between sex and knowledge of reproductive health.

Relationship between Education Level and Reproductive Health Knowledge

The results of the analysis in table 2 showed that as many as 32.8 respondents with low education have less knowledge of reproductive health. The results of statistical tests showed that there was a relationship between the level of education and knowledge of reproductive health based on the p-value obtained, which was 0.000.

Relationship between the Role of Educational Agencies and Knowledge of Reproductive Health

Table 1. Characteristics of Respondents

Variable	Frequency (n)	Percentage (%)
Age		
22-24 year	234	58.5
18-21 year	166	41.5
Sex		
Male	221	55.3
Female	179	44.7
Educational Level		
High	342	85.5
Low	58	14.5
Domicile		
West Jakarta	96	24.0
Center Jakarta	29	7.3
South Jakarta	122	30.5
East Jakarta	118	29.5
North Jakarta	35	8.7
Family Income		
≥ DKI Jakarta Provincial Minimum Wage	231	57.7
< DKI Jakarta Provincial Minimum Wage	169	42.3
Main Activities		
School/College	289	72.3
Working	85	21.3
Other	26	6.4
Reproductive Health Knowledge		
Good	349	87.3
Poor	51	12.7
Total	400	100

Table 2 showed that 14.6% of respondents did not receive reproductive health knowledge in their respective educational institutions, thus their extent of knowledge on reproductive health was lacking. From the existing number (p = 0.348), it was concluded that there was no correlation between the role

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of educational institutions and knowledge of reproductive health.

Correlation between Information Media and Reproductive Health Knowledge

The results of the statistical test in Table 2 described respondents who use print media as a source of reproductive health information, 42.9% of them had less knowledge of reproductive health. Furthermore, P-value of 0.047 indicated there was correlation between information media and knowledge of reproductive health.

Correlation between Peer Influence and Reproductive Health Knowledge

In Table 2, the results of the bivariate analysis showed that there was a correlation between the influence of peers and the knowledge of reproductive health possessed by the respondents. This can be seen in the p value of 0.001 or p less than 0.05. Moreover, 20.4% of respondents with less knowledge of reproductive health were found among respondents who were uninfluenced by peers.

Table 2. Bivariate Analysis between Independent Variable and Reproductive Health Knowledge

Number	Variable	Reproductive Health Knowledge				Total		*p-value*	POR (95% CI)
		Good		Poor					
		n	%	n	%	n	%		
1	**Age**								
	22-24 year	202	86.3	32	13.7	234	100	0.612	0.81 (0.44-1.496)
	18-21 year	147	88.6	19	11.4	166	100		
2	**Sex**								
	Female	210	95.0	11	5.0	221	100		
	Male	139	77.7	40	22.3	179	100	0.000	5.49 (2.72-11.07)
3	**Educational Level**								
	High	310	90.6	32	9.4	342	100		
	Low	39	67.2	19	32.8	58	100	0.000	4.72 (2.44-9.11)
4	**Education Role**								
	Present	179	89.1	22	10.9	201	100	0.348	1.38 (0.76-2.51)
	None	170	85.4	29	14.6	199	100		
5	**Information Media**								
	Online Media	345	87.8	48	12.2	393	100		
	Printed Media	4	57.1	3	42.9	7	100	0.047	5.39 (1.17-24.82)
6	**Peer Influence**								
	Present	236	91.5	22	8.5	258	100		
	None	113	79.6	29	20.4	142	100	0.001	2.75 (1.51-5.00)

The Most Related Variable to the Reproductive Health Knowledge

From Table 3 of the final multivariate modeling, it was found that the sex variable was the variable most related to the dependent variable (reproductive health knowledge) because it has the largest Exp(B) or POR value of 5.629. Therefore, it can be concluded that respondents' sex was the most related variable to knowledge of reproductive health and respondents who are male have 5.629 times (95%CI 1.695-11.757) chance to have less knowledge about reproductive health compared to female respondents after being controlled by education level and peer influence.

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Table 3. Final Model of Multivariate Analysis

Variable	B	SE	P Value	Exp(B)	95% CI	
					Lower	Upper
Sex	1.728	0.376	0.000	5.629	2.695	11.757
Educational Level	1.139	0.362	0.002	3,.124	1.536	6.355
Peer Influence	1.136	0.322	0.001	3.114	1.621	5.980
Constant	-3.718	0.387	0.000	0.0024		

DISCUSSIONS

Transformations experienced by adolescents, both physical, psychological, cognitive, and social transformations, encourage adolescents to tend to take risks compared to other age groups. Coupled with the Covid-19 pandemic which has had many impacts on youth groups. The group of teenagers was considered as a group that was less at risk for being infected with Covid-19. However, the real impact on adolescents due to the Covid-19 pandemic was the gap in health, education, psychological/mental welfare of adolescents, to deviations in adolescent behavior. (Addae, 2021). This condition led to the potential to encourage adolescents to fall further into reproductive health problems that stem from deviant behavior. Adolescent sexual behavior deviations had an impact on their reproductive health conditions.

Reports from the PKPR Poly Visits of Sub-district Health Centers in the DKI Jakarta area during 2020 indicated that adolescent sexual behavior in DKI Jakarta was concerning since those 3,702 female adolescents aged 10-19 years were pregnant, 45 of them gave birth and 606 adolescents experienced abortions. It was also found that 1,422 boys and girls had pre-marital sex, 311 adolescents experienced Sexually Transmitted Infections (STI), 200 adolescents were infected with HIV, and 742 adolescents had early marriages. The results of the report indirectly reflected the lack of knowledge on reproductive health among adolescents in DKI Jakarta. However, research results showed that most of the adolescents (87.3%) in DKI Jakarta have good knowledge of reproductive health. Knowledge of reproductive health in question includes information on puberty, fertile period, STI-HIV/AIDS, pregnancy, and abortion. Therefore, these results showed that they were inversely proportional to reproductive health problems in adolescents in DKI Jakarta during the Covid-19 pandemic. Meanwhile, according to Irwan (2017), a person who does not have knowledge implied that he does not have a basis in making decisions and determining actions to the problems faced in controlling his behavior, since knowledge is an important part for adolescents. The results of research conducted by Romulo et al (2014) on 106 junior high school students in Banjarmasin which proved that knowledge of reproductive health in adolescents is the main contributor in influencing sexual behavior of junior high school students in Banjarmasin. The better adolescents' knowledge of reproductive health, the lower implication of adolescent sexual behavior.

Relationship between Information Media and Reproductive Health Knowledge

The results obtained from the bivariate test between information media variables and reproductive health knowledge variables explained that there was a relationship between the two variables with a p-value of 0.047 (95% CI: 1.17-24.82). Online media is the most widely used media to access reproductive health information than print media with a ratio of 98.3%: 1.7% thus respondents who use online media have a better level of reproductive health knowledge than respondents who use print media. This is different from the research of Widyastari, Isarabhakdi dan Shaluhiyah (2018) which stated that print, TV, and radio media are the sources used to obtain reproductive health information, these media are also proven to be significantly related to reproductive health knowledge (p = 0.00 and POR=1.66). It is necessary to filter the information presented in the media, especially online media. The media does not only present positive information that can increase one's knowledge. However, it also provides negative information that can affect a person's behavior such as pornography (Yutifa, Dewi dan Misrawati, 2015).

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Relationship between Peers' Influence and Reproductive Health Knowledge

From the results of statistical tests, it was found that there was a significant relationship between the influence of peers and knowledge of reproductive health which was seen at p value = 0.001 (95% CI: 1.51-5.00). Most teenagers around 64.5% get information about reproductive health, especially related to sexual health from their peers. The results of this study are in line with research by Devita dan Ulandari (2017) which stated that adolescent knowledge about reproductive health is positively related to the influence of peers and is seen in the large p value < 0.05 (p-value 0.043). The influence of good friends will make a person have good knowledge as well so that it can prevent adolescents from risky acts such as free sex (Peçi, 2017). However, unlike previous studies, in their research , Kyilleh, Tabong dan Konlaan (2018) stated that respondents who received health information from peers as the main source tend to have low reproductive health knowledge.

Most Associated Variable with Knowledge of Reproductive Health

The results of the multiple logistic regression tests in the multivariate analysis showed that gender had an appropriate relationship with knowledge of reproductive health. So that male adolescents have a 5.62 times (95% CI: 2.69-11.75) chance to have less reproductive health than adolescents after being controlled by education level and peer influence. The results of research by Ashebir, Tadesse dan Yimer (2020) reported that gender was associated with reproductive health levels in high school students (p <0.05), where students had a better level of knowledge than male students. Contrary to the results of previous studies, in a study conducted by Kacha dan Lakdawala (2019) , it was stated that men had an average value of reproductive health knowledge (Mean ± SD: 25.47 ± 4.45) which was better than women (Mean ± 4.45). ± SD: 25.47 ± 4.45) ± SD: 24.88 ± 4.78). Meanwhile, the results of an analytical study conducted by Berek dkk (2019) stated that there was a large correlation between sex and reproductive health with a p value of < 0.05 (p = 0.01). Adolescent girls have knowledge about good health because of the possibility that women are more likely to use their free time to read or calculate reproductive health time.

Research Limitations

There may be bias in this study, namely information bias and recall bias. Information bias is difficult to avoid because data collection was done online by using electronic questionnaires and respondents filled out the questionnaires themselves through their respective devices. This has the potential to cause misunderstanding of respondents in interpreting the questions contained in the electronic questionnaire. Meanwhile recall bias can occur when respondents answered questions that ask for information during the last three months.

CONCLUSION

A total of 400 research respondents aged 18-24 years. Respondents are late teens who mostly live in South Jakarta and their main activity during the pandemic is school/college. Sex, education level, information media, and peer influence are variables that are significantly related to adolescent knowledge about reproductive health during the pandemic in DKI Jakarta. The variable that was found to be most related to adolescent knowledge about reproductive health was gender. Adolescent boys have the potential to have less knowledge of reproductive health than adolescent girls.

SUGGESTION

This research is expected to be the basis for the DKI Jakarta provincial government in making policies, especially for educational institutions in order to optimize their role as facilitators who provide a system to support an effort of increasing adolescent knowledge about reproductive health during the pandemic in a comprehensive and sustainable manner. This is to overcome reproductive health problems that exist in adolescents in DKI Jakarta, because educational institutions are considered the main source for adolescents to access reproductive health information.

REFFERENCE

Addae, E. A. (2021) 'COVID-19 pandemic and adolescent health and well-being in sub-Saharan Africa: Who cares?', *International Journal of Health*

JPH RECODE March 2022; 5 (2): 90-98
http://e-journal.unair.ac.id/JPHRECODE
http://dx.doi.org/10.20473/jphrecode.v5i2.29110

Planning and Management, 36(1), pp. 219–222. doi: 10.1002/hpm.3059.

Adventus, Jaya, I. M. M. and Mahendra, D. (2016) 'Buku Ajar Promosi Kesehatan', *Pusdik SDM Kesehatan*,)1(ث فقتثق, pp. 6–8.

Alim, A. (2020) *Akibat Pandemi, Nikah Dini Pun Marak Terjadi*. Available at: https://www.gatra.com/detail/news/496076/hukum/akibat-pandemi-nikah-dini-pun-marak-terjadi (Accessed: 17 March 2021).

Alquaiz, A. M., Kazi, A. and Muneef, M. Al (2013) 'Determinants of sexual health knowledge in adolescent girls in schools of Riyadh-Saudi Arabia : a cross sectional study'.

Andani, P. R. (2021) 'Correlation Between Knowledge And Attitude Toward Personal Menstrual Hygiene Practice Among Adolescents', *Journal of Public Health Research and Community Health Development*, 4(2), p. 88. doi: 10.20473/jphrecode.v4i2.14460.

Andina, E. (2021) 'Meningkatnya Angka Perkawinan Anak Saat Pandemi Covid-19', *INFO singkat*, 13(4), pp. 13–18. Available at: https://berkas.dpr.go.id/puslit/files/info_singkat/Info Singkat-XIII-4-II-P3DI-Februari-2021-232.pdf.

Ashebir, W., Tadesse, M. and Yimer, B. (2020) 'Knowledge and Attitude towards Sexual and Reproductive Health Rights and Associated Factors among High School Students in Machakel District, Northwest Ethiopia', pp. 2–4. doi: 10.21203/rs.2.23642/v1.

Berek, P. A. L. *et al.* (2019) 'Hubungan Jenis Kelamin Dan Umur Dengan Tingkat Pengetahuan Remaja Tentang Hiv/Aids Di Sman 3 Atambua Nusa Tenggara Timur 2018', *Jurnal Sahabat Keperawatan*, 1(01), pp. 4–13. doi: 10.32938/jsk.v1i01.85.

BKKBN (2020) 'Masalah Kesehatan Reproduksi Remaja Perempuan', *BKKBN*. Available at: https://skata.info/article/detail/469/wajib-tahu-masalah-kesehatan-reproduksi-remaja-perempuan.

BPS (2020) *Statistik Kesejahteraan Rakyat Provinsi DKI Jakarta 2020*.

Devita, R. and Ulandari, D. (2017) 'Gambaran Media Informasi, Pengaruh Teman, Tempat Tinggal Dengan Pengetahuan Kesehatan Reproduksi Remaja Di Kota Palembang', *Lppm Semnas Iib Darmajaya*, pp. 45–53.

Dinas Kesehatan Provinsi DKI Jakarta (2021) *Data Kunjungan kasus Poli PKPR di Puskesmas Kecamatan Wilayah DKI Jakarta Tahun 2020*.

Irwan (2017) *Etika dan Perilaku Kesehatan*.

Kacha, T. G. and Lakdawala, B. M. (2019) 'Sex Knowledge and Attitude Among Medical Interns in a Tertiary Care Hospital Attached to Medical College in Ahmedabad, Gujarat', *Journal of Psychosexual Health*, 1(1), pp. 70–77. doi: 10.1177/2631831818821540.

Kementrian Kesehatan (2015) *Situasi Kesehatan Reproduksi Remaja*. Available at: https://www.kemkes.go.id/download.php?file=download/pusdatin/infodatin/infodatin reproduksi remaja-ed.pdf.

Kementrian Kesehatan RI (2020a) *Infodatin HIV/AIDS Indonesia*.

Kementrian Kesehatan RI (2020b) 'Laporan Perkembangan HIV/AIDS dan Penyakit Infeksi Menular Seksual (PIMS) Triwulan IV Tahun 2020'.

Kementrian Pemberdayaan Perempuan dan Perlindungan Anak (2020) *PANDEMI COVID-19, ANAK-ANAK RENTAN JADI KORBAN EKSPLOITASI DAN PORNOGRAFI DI RANAH DARING, Kementrian Pemberdayaan Perempuan dan Perlindungan Anak*. Available at: https://www.kemenpppa.go.id/index.php/page/read/29/2743/pandemi-covid-19-anak-anak-rentan-jadi-korban-eksploitasi-dan-pornografi-di-ranah-daring (Accessed: 26 April 2021).

Konsorsum Psikologi Ilmiah Nusantara (2020) 'Human Behavior in The New Normal Post-Pandemic: Challenges and Opportunities for Psychology in The Archipelago', in.

Kyilleh, J. M., Tabong, P. T. N. and Konlaan, B. B. (2018) 'Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices: A qualitative study in the West Gonja District in Northern region, Ghana', *BMC International Health and Human Rights*, 18(1), pp. 1–12. doi: 10.1186/s12914-018-0147-5.

Naura, S., Cukarso, A. and Herbawani, C. K.

JPH RECODE March 2022; 5 (2): 90-98
http://e-journal.unair.ac.id/JPHRECODE
http://dx.doi.org/10.20473/jphrecode.v5i2.29110

(2020) 'TRADITIONAL BELIEFS AND PRACTICES AMONG PREGNANT WOMEN IN Kepercayaan dan Praktik Tradisional Antara Perempuan Hamil Di Masyarakat Jawa : Tinjauan Literatur', 4(1), pp. 71–80.

Peçi, B. (2017) 'Peer Influence and Adolescent Sexual Behavior Trajectories: Links to Sexual Initation', *European Journal of Multidisciplinary Studies*, 4(3), p. 96. doi: 10.26417/ejms.v4i3.p96-105.

Pinandari, A. W., Wilopo, S. A. and Ismail, D. (2015) 'Pendidikan Kesehatan Reproduksi Formal dan Hubungan Seksual Pranikah Remaja Indonesia', *Kesmas: National Public Health Journal*, 10(1), p. 44. doi: 10.21109/kesmas.v10i1.817.

Rahayu, A. *et al.* (2017) *Kesehatan Reproduksi Remaja & Lansia, Journal of Chemical Information and Modeling*.

Rahman, A. A. *et al.* (2014) 'Knowledge of Sexual and Reproductive Health among Adolescents Attending School in Kelantan, Malaysia', (May 2011).

Rochimawati dan Sumiyati (2020) *Miris, Angka Aborsi Ilegal di Indonesia Tergolong Tinggi*. Available at: https://www.viva.co.id/gaya-hidup/parenting/1295675-miris-angka-aborsi-ilegal-di-indonesia-tergolong-tinggi (Accessed: 17 March 2021).

Romulo, H. M. *et al.* (2014) 'Peranan Pengetahuan Kesehatan Reproduksi Terhadap Perilaku Seksual Remaja Awal Role of Reproductive Health Knowledge Towards Early Adolescents' Sexual Behaviors'.

Santoso, S. B. (2021) *Inilah Dinamika Kesehatan Reproduksi di Masa Pandemi*. Available at: https://www.cendananews.com/2020/11/inilah-dinamika-kesehatan-reproduksi-di-masa-pandemi.html (Accessed: 12 March 2021).

Suharti, S. and Surmiasih, S. (2016) 'Rendahnya Pengetahuan Kesehatan Reproduksi Sebagai Penyebab Perilaku Seks Bebas Pada Remaja', *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 1(1), pp. 56–60. doi: 10.30604/jika.v1i1.8.

Tim Peneliti Guttmacher Institute dan FKM UI (2018) *Aborsi di Jawa*.

Widyastari, D. A., Isarabhakdi, P. and Shaluhiyah, Z. (2018) '" Women Won ' t Get Pregnant with one Sexual Intercourse " Misconceptions in Reproductive Health Knowledge among Indonesian Young Men.', (June 2017).

Yutifa, H., Dewi, A. P. and Misrawati (2015) 'Hubungan paparan Pornografi Melalui Elektronik Terhadap Perilaku Seksual Remaja', *Jurnal Online Mahasiswa Program Studi Ilmu Keperawatan*, 2(2), pp. 1141–1148.