How to Cite

Realita, F., & Astuti, D. A. (2023). The impact of premarital sexual behavior on adolescents during the COVID-19 pandemic. *International Journal of Health & Medical Sciences*, 6(2), 85-92. https://doi.org/10.21744/ijhms.v6n2.2123

The Impact of Premarital Sexual Behavior on Adolescents during the COVID-19 Pandemic

Friska Realita

Universitas 'Aisyiyah Yogyakarta, Yogyakarta, Indonesia Email: friskarealita@unissula.ac.id

Dhesi Ari Astuti

Universitas 'Aisyiyah Yogyakarta, Yogyakarta, Indonesia Corresponding author email: dhesi@unisayogya.ac.id

Abstract---The COVID-19 pandemic is a disease that has spread all over the world. Premarital sexual behavior is behavior that is driven by sexual desire with the opposite sex or with the same sex. Talking about sexuality and reproductive health is still a taboo subject for teenagers, so children will seek it from various sources, one of which is social media that not all of the information can be accounted for. This study aims to collect scientific evidence on the impact of premarital sexual behavior on adolescents during the COVID-19 pandemic. The method used in this research is a scoping review. Articles were acquired from three databases, namely Pubmed, Science Direct, and Google Scholar. Results: After reviewing 11 articles using the scoping review, it resulted in a theme of the impact of premarital sexual behavior on adolescents during the COVID-19 pandemic.

Keywords---adolescent, COVID-19 pandemic, premarital sexual behaviour.

Introduction

The COVID-19 pandemic is a disease outbreak that has spread throughout the world (Ismaniar & Utoyo, 2020). As a result of the current pandemic, the government has started to enforce PSBB (Large-Scale Social Restrictions) activities or commonly called social distancing, by which people are required to carry out online or virtual activities using the internet, such as implementing school-from-home (SFH), working from home (WFH), and so forth. Of this phenomenon, people always rely on the internet network to conduct online school and work (Herliandry & Suban, 2020).

Premarital sexual behavior is behavior that is driven by sexual desire, both with the opposite sex or with the same sex. The forms of sexual behavior that adolescents usually do are kissing, necking or kissing the partner's neck, petting or social contact behavior by touching the breasts or touching the partner's genitals, and intercourse or physical activity of sex by inserting the male genital to the female genital and they consider this behaviours as normal activities which can trigger adolescents to explore their curiosity. Many of them engage in risky sexual behavior, such as having unprotected sex with multiple partners or seeking out partners who may carry a high-risk disease, such as prostitutes. This puts them at high risk of unwanted pregnancies, abortions, and sexually transmitted diseases, including HIV (Sarwono, 2015).

Talking about sexuality and reproductive health is still a taboo subject for teenagers, so children will seek it from various sources, one of which is social media that not all of the information can be accounted for. Therefore, it is necessary to supervise and play the role of parents in the use of social media (Barokah & Zolekhah, 2019). Having good knowledge, it will protect adolescents from risky courtship behavior. The better the knowledge of adolescents, the more they avoid premarital sexual behavior (Finlay et al., 2020). Based on the results of the Program Accountability Survey (SKAP 2019) in Central Java, there were 1.9% of male adolescents and 0.4% of female adolescents had engaged in premarital sexual behavior (BKKBN, 2019). According to Law (UU) No. 16 of 2019 Article 7 paragraph (2) states that marriage is only permitted if the man and woman have reached the age of 19 years.

Submitted: 27 March 2023 | Revised: 18 April 2023 | Accepted: 09 May 2023

However, if there are things that deviate from the law, such as unintended pregnancy conceived out of wedlock, due to promiscuity, while the age of men and women have not reached the age of 19 years, then the law can still provide the possibility of the age limit that has been set by asking for dispensation to the court or other official appointed by both parents from the female and male side (Constitutional Court, 2019).

The risks of having premarital sex are getting a bad reputation, feeling less confident and trusting, being at risk of getting sexually transmitted diseases, and having unintended pregnancies that can result in child marriage or abortion (De Ridder, 2017). In women who give birth at a very young age, it may be associated with biological factors that cause complications during pregnancy and childbirth. It can be said that babies born with very small weights have a 5-fold risk of dying compared to babies born with average or large baby weights.

Method

This research is a literature review, the method used is the scoping review. The scoping review is a literature review to synthesize research results. The purpose of the scoping review is to map the existing literature in the field of interest in terms of volume, nature, and characteristics of the main research studied, by compiling, summarizing, and reporting the results, which provide descriptive and numerical summaries of the data and thematic analysis of selected journals. The stages carried out in this scoping review consist of: (1) identifying the focus of the review, (2) developing a focus review and search strategy using the PICO format (3) identifying relevant studies, (4) mapping the data using PRISMA Flowchart (Preferred Reporting Items for Scoping), (5) Data extraction by compiling, summarizing and reporting the results of the discussion.

Results and Discussion

Problem identification

At this stage, the researcher identified the research questions used as a reference in the article's search. To find out the implementation of midwifery services using midwifery group practice Practical EBM often uses a special framework, called the Population Intervention Comparison Outcome (PICO), to formulate questions and facilitate literature searches. This process identifies the key concepts for an effective search strategy.

Table 1 Framework

Population	Intervention	Comparison	Outcome
Adolescents	behavior on adolescents	Adolescents who do not engage in premarital sexual behavior during the COVID-19 pandemic	The impact

Relevant articles identification

The article search strategy was developed using several databases and several sources to search for gray literature. There are several stages used in identifying relevant studies, which are as follows:

a) Databases

Using a database in a scoping review in this study is to see better credibility in addition to maintaining the quality of the literature to be taken. The databases taken in this study are Pubmed and science direct.

b) Gray literature

The specification of the gray literature website is to index literature related to research, besides looking for several sources until it is saturated so that there is no misinformation obtained. The gray literature used is Google Scholar. The exclusion and inclusion criteria are as follows:

PRISMA Flowchart is used to describe in detail and transparently the process of identifying PRISMA literature. PRISMA is the Preferred Reporting Item for Systematic reviews and Meta-analyses, developed to assist authors in reporting Systematic Reviews (SR) and Meta-analyses (MA). PRISMA is considered appropriate to use because in

its use it can improve the quality of publication reporting (Peters et al., 2015). The keywords used in the search for articles are: (((((pain perception)) OR (overcome pain)) AND (dysmenorrhea pain)) OR (primary dysmenorrhea). After obtaining the evidence, a critical appraisal is carried out using a form from the JBI Critical Appraisal Tools to assess the quality of the evidence. The data was selected in accordance with the criteria that the researcher had determined. The stages of data filtering are as follows.

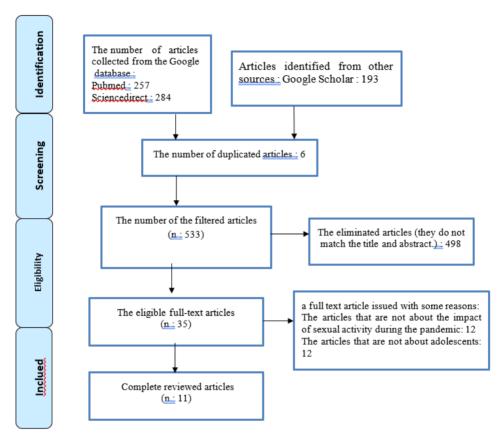


Figure 1. Prisma flow chart

Table 3 Charting data

No	Title/ Author/ Year/ Grade	Country	Objectives	Type of Research	Data Collection	Participants/ Samples	Result
1	Kimberly M. Nelson, Ph.D. Physical Sex Is Over for Now": Impact of COVID- 19 on the Well-Being and Sexual Health of Adolescent Sexual Minority Males in the U.S.	U.S.	The study aims to explain how the COVID-19 pandemic and social distancing can impact the wellbeing and sexual health of adolescent sexual minority males (ASMM) during the early phases of social distancing in the U.S.	Quantitative	Online survey	151 participants aged 14-17 years old from 27 March to 8 May 2020	The majority (57%) of participants were worried about COVID-19. Nearly (91%) implemented social distancing. The impact of COVID-19 is that many couples engage in direct sexual activity less frequently and prefer to masturbate and view pornography, thus it has a negative effect on their mental health.
2	(Gillespie et al., 2021) Coping Using Sex During the Coronavirus Disease 2019 (COVID-19) Outbreak in the United Kingdom	United Kingdom	The aim of the study was to examine the effects of social distance, loneliness, difficulty with emotional management, and self-management of the	Quantitative	Survey	789 participants ranging from 18-59 years old	 a. Mental health issues are much better than before the lockdown b. Younger participants and having a higher household income had a big impact on them and Relationship quality improved for younger participants and worsened in older participants after the lockdown

			participants who were coping using sex during the outbreak in				c. The quality of the relationship is no difference between before and during the pandemic
3	(Downing et al., 2021) The impact of childhood sexual abuse and adverse childhood experiences on adult health-related quality of life	USA	the UK. This study aimed to examine the association between self-reported CSA including CSA traits and Adult HRQoL	Chi-square dan t-tests Quantitative	Survey	Initial 14,697 participants, 3737 excluded due to missing responses to the CSA questions and 336 additional surveys due to missing data on covariates bringing the final sample to 10,624 participants who were asked the CSA and HRQoL questions.	 a. Individuals exposed to CSA who reported poor general health (AOR, 1.51; 95% CI, 1.09-2.09) b. Physically reports of 14 days or more of being unwell (AOR, 1.46; 95% CI, 1.06-2.02) c. Mentally unhealthy reports of 14 days or more (AOR, 1.86; 95% CI, 1.30-2.64) d. In case of activity restriction report 14 or more unhealthy days (AOR, 2.22; 95% CI, 1.58-3.10) in a month e. HRQoL results were worse for respondents who were forced to have sex as a child compared to those who were touched or forced to touch someone
4	(Tu et al., 2021) Impact of the COVID-19 Pandemic on sexual and reproductive health among Women with induced abortion	Beijing, China	The study aims to assess the impact of the COVID-19 pandemic on sexual and reproductive health among women with induced abortion	Kohort study Quantitative	survey	3789 pregnant women (<12 weeks) in maternal and child hospitals from seven provinces in China	a. Comparison of the frequency of sexual activity (<1 per week) before during the COVID-19 pandemic, namely 1213/1723 (70.4%) compared to 884/2052 (43.1%) b. The ratio of women who used contraception before and during the COVID-19 pandemic was 875/1992 (43.9%) compared to 1109/1696 (65.4%) c. The ratio of women who used abortion services due to surgical factors before and during the COVID-19 pandemic was 1742/2003 (87.0%) compared to 1492/1696 (12.0%) d. The ratio of women who used abortion services due to medical problems before and during the COVID-19 pandemic was 261/2003 (13.0%) compared to 204/1696 (12.0%)
5	(Zhang et al., 2021) The Impact of Mental Health and Stress Concerns on Relationship and Sexuality Amidst the COVID-19 Lockdown	China	The purpose of the study was to determine changes in the health, relationships and sexuality of Chinese couples living together in the midst of the early stages of the COVID-19 pandemic	Cross- sectional Quantitative	Questioners	1,139 participants consisted of 735 men and 404 women Chinese citizens aged 18 years in March 2020	 a. The average age of the participants is 33.6±9.5 years (70.1%) b. The overall relationship and sexuality 69.7% no change in frequency of sexual intercourse per week during the COVID-19 pandemic c. 78.8% majority of the Chinese population during the Pandemic did not affect the quality of their sex life d. 52.3% of the Chinese population during the pandemic didn't affect their emotional bond
6	(Seme et al., 2021) Impact of the COVID-19 Pandemic on Adolescents' Sexual and Reproductive Health in Low- and Middle-Income Countries	Canada, Brazil, UK, Ghana, Australia	The aim of the study was to identify and assess the existing literature on the impact of the pandemic on SRH needs and access to services by adolescents in LMICs.	Descriptive Quantitative	Extract data	Adolescents in LMICs	Adolescents face various SRH vulnerabilities during COVID-19 which can be categorized into several themes, including limited access to sexual and reproductive health services, school closures and increased rates of early marriage, sexual violence during COVID-19, disruption in maternity care, youth involvement in exploitation, intervention to improve reproductive health services.

7	(Starks et al., 2020) Evaluating the impact of COVID-19: A cohort comparison study of drug use and risky sexual behavior among sexual minority men in the U.S.A.	USA	The aim of the study was to compare the use of marijuana, other illegal drugs, and sexual behavior with casual partners among minority consumers who were active on social networks and dating apps before and during the COVID-19 pandemic.	Cohort- control study Quantitative	Survey	455 adult respondents from 65.707 participants on 6-17 May 2020	 a. Cannabis use decreased drastically before and during the pandemic from 45.7% to 34.5% b. The use of illegal drugs has also decreased from 22.9% before the pandemic to 11.0% during the pandemic
8	(Rahiem, 2021) COVID-19 and the surge of child marriages: A phenomenon in Nusa Tenggara Barat, Indonesia	Indonesia	The purpose of the study was to find out the cause of the increasing number of child marriages since the outbreak of COVID-19 in NTB	Qualitative	Interview	23 participants (10 parents and 13 teenagers) who got married in March and December 2020	 a. Adolescents marry because they believe that marriage is an escape from schoolwork, homework, stress, and boredom to study and staying at home during a pandemic b. Adolescents marry because of customary law that encourages or allows children to marry c. Lack of understanding of the impact and long-term implications of child marriage d. The financial issue that triggers parents to marry off their children at a young age e. The influence of the surrounding environment and peers that encourage child marriage
9	(Steiner et al., 2021) COVID-19 and Sexual and Reproductive Health Care: Findings From Primary Care Providers Who Serve Adolescents	Atlanta Georgia	The purpose of the study is to find out changes in the availability of SRH services directly, changes in the accessibility and utilization of SRH, and to support the provision of SRH services during the production.	Descriptive Quantitative	Survey	Patients aged 15-19 years old per week during the pandemic (n=791)	a. Doctors' clinical practice providing contraceptive services, placing, removing implants or testing for sexually transmitted infections decreased by 51% before the pandemic and 36% during the pandemic. b. Provision of follow-up services is provided around 61% and 44% provide services for sexually transmitted infections through telehealth
10	(Nguyen, 2021) Calculating the impact of the COVID-19 pandemic on child abuse and neglect in the U.S.	USA	pandemic. The purpose of the study is to estimate the number of CAN investigative deficits and the number of prevention estimates resulting from CAN cases in the US	Quantitative	Questioners	Kids in NYC, Florida, New Jersey, and Wisconsin From March–December 2020	 a. Prior to the pandemic, there was an approximately 0.7 CAN monthly increase in the NYC investigation and a 4.2 CAN in New Jersey nonsignificant monthly decrease in the 0.6 CAN investigation in Wisconsin. b. After the pandemic started there was a significant monthly decrease in n(p<001) in each of the four jurisdictions including 1425.6 fewer CAN investigations in NYC, 3548 fewer CAN investigations in Florida, 963 fewer CAN investigations in New Jersey and 529, 1 less CAN investigation in Wisconsin c. The COVID-19 pandemic causes a
11	(Sarialioğlu et al., 2021) Determining the Relationship between loneliness and internet addiction among Adolescents during the COVID-19 Pandemic in Turkey	Turkey	The purpose of the study was to determine the relationship between the level of loneliness felt by adolescents during the pandemic and the level of internet addiction respectively	Descriptive correlation Quantitative	Survey	482 teenagers who are willing to learn	sharp decline in CAN investigations Addiction to internet pornography access in adolescents is increasing due to loneliness

Critical appraisal

Researchers conducted a critical appraisal using The Joanna Briggs Institute (JBI). The purpose of this assessment using the JBI was to assess the methodological quality of studies and to determine the extent to which a study has addressed design bias. JBI is a complete tool for all studies to be assessed and easy to understand. The scoring criteria used are divided into 4 yes: 4, no: 3, unclear: 2, Not applicable: 1. The grades which are based on the number of questions and different scores are determined by the author.

Based on the search results of two databases and Google Scholars, using keywords compiled through the PICO framework, the researchers found 7 journal articles that were considered to meet the inclusion and exclusion criteria. In this scoping review literature study, the characteristics of the article were obtained based on the research methodology and the country, then the researcher determined the theme, namely the impact of premarital sexual behavior on adolescents during the COVID-19 pandemic (Shabrina & Nursasi, 2018; Abraham & Rahardjo, 2015; Karjono et al., 2017).

Methodology

There were 10 articles using a quantitative research methodology with a questionnaire survey design and 1 article using a qualitative research method with an interview design. Based on the critical appraisal that has been carried out on 11 articles obtained from journals that were previously examined through Scimago, jr and Sinta. ristekbrin. In research articles with Grade A in quantitative research methodology, namely articles number 3,4,5,6,7,9 and 11 criteria in the sample are clearly defined and the subject and place of research have been explained in detail. Furthermore, in Grade B the quantitative research methodology in articles number 1,2.8 and 10 participants in the research study used a similar comparison. The characteristics of the articles in this scoping review are based on countries consisting of developed countries, namely the USA with 4 articles, China with 2 articles, 1 Turkey article and 1 UK article. Developing countries consist of 1 Indonesia and 1 mixture of developed and developing countries.

The impact of premarital sexual behavior on adolescents during the COVID-19 pandemic

Some studies on the impact of premarital sexual behavior on adolescents during the COVID-19 pandemic are several studies in articles 1,4,7,9,10 that explain that there is a decrease in premarital sexual behavior during the COVID-19 pandemic. This situation can be explained by the following explanation: the research conducted by Kimberly M.NelsonPh.D et al obtained the majority results (57%) of participants are worried about COVID-19. Nearly (91%) implement social distancing. The impact of COVID-19 is that many couples engage in direct sexual activity less frequently and prefer to masturbate and view pornography, which has a negative effect on their mental health. Research conducted by Pangcheng Tu et al explained that sexual activity and contraceptive methods before and during COVID-19 decreased. Research conducted by Tyrel J et al also explained that the use of cannabis use decreased drastically before and during the pandemic from 45.7% to 34.5%, the use of illegal drugs also decreased from 22.9% before the pandemic to 11.0 % during the pandemic (Mberu & White, 2011; Salih et al., 2015; Toldam et al., 2022; Rosramadhana et al., 2021).

Research conducted by Riley J et al explained that the clinical practice of doctors providing contraceptive services, placing, removing implants or testing for sexually transmitted infections decreased by before the pandemic 51% and during the pandemic 36%, continued service provision was provided by around 61% and 44% provided infection services. sexually transmitted via telehealth. Research conducted by Loc H Nguyen explains that after the pandemic started, there was a significant monthly decrease in n(p<001) in each of the four jurisdictions including 1425.6 fewer CAN investigations in NYC, 3548 fewer CAN investigations in Florida, 963 fewer CAN investigations in New Jersey and 529.1 fewer CAN investigations in Wisconsin. Researchers also found an increase in cases of sexual behavior during the pandemic, namely in articles 3, 6, 8, and 11. The increase was in the form of sexual behavior, the incidence of child marriage, and the incidence of watching, porn sites on the internet.

Research conducted by Nancy R explains HRQoL results are worse for respondents who were forced to have sex as a child compared to those who were touched or forced to touch someone. Research conducted by Salima Meherali explained that adolescents face various SRH vulnerabilities during COVID-19 which can be categorized into several themes, including limited access to sexual and reproductive health services, school closures and an increase in the number of child marriages, sexual violence during COVID-19, disruptions in maternity care, adolescent exploitation, intervention to improve reproductive health services (Puspasari & Pawitaningtyas, 2020; Zuo et al., 2012; Sridawruang et al., 2010).

Research conducted by Mailia D.H Rahiem has seen an increase in child marriage since the outbreak of COVID-19 because adolescents get married because they believe that marriage is an escape from schoolwork, homework, stress, bored with studying and staying at home during the pandemic, adolescents marry because of customary law that encourages or allow children to marry, lack of understanding of the impact and long-term implications of children under the age of marriage, the economy that triggers parents to marry off their children at an early age, the influence of the surrounding environment and peers that encourage child marriage. Research conducted by Arzu Sarialioğlu Tutku Atay found that addiction to internet pornography access in adolescents is increasing due to loneliness.

Conclusions and Suggestions

In this literature scoping review, researchers can conclude that the majority experienced a decrease in the incidence of sexual behavior in adolescents and adolescents experienced an increase in sexual behavior influenced by social media. Access to reproductive services is also still closed so adolescents experience difficulties when they need reproductive servic.

References

- Abraham, J., & Rahardjo, W. (2015). Psychopathy, sexual values dimensions, and premarital sexual behaviour among urban unmarried adolescents. *Procedia-Social and Behavioral Sciences*, 165, 2-11. https://doi.org/10.1016/j.sbspro.2014.12.598
- Barokah, L., & Zolekhah, D. (2019). Hubungan penggunaan Media massa dengan Tingkat pengetahuan dampak pernikahan dini terhadap kesehatan reproduksi. *Jurnal Kebidanan*, 44-53.
- BKKBN. (2019). Survei Kinerja dan Akuntabilitas Program KKBPK Tahun 2018-Panduan Pewawancara. Jakarta:BKKBN.
- De Ridder, S. (2017). Social Media and Young People's Sexualities: Values, Norms, and Battlegrounds. *Social Media and Society*, 3(4).
- Downing, N. R., Akinlotan, M., & Thornhill, C. W. (2021). The impact of childhood sexual abuse and adverse childhood experiences on adult health related quality of life. *Child Abuse and Neglect*, 120(May), 105181.
- Finlay, J. E., Assefa, N., Mwanyika-Sando, M., Dessie, Y., Harling, G., Njau, T., Chukwu, A., Oduola, A., Shah, I., Adanu, R., & Bukenya, J. (2020). Sexual and reproductive health knowledge among adolescents in eight sites across sub-Saharan Africa. *Tropical Medicine and International Health*, 25(1), 44–53.
- Gillespie, S. M., Jones, A., Uzieblo, K., Garofalo, C., & Robinson, E. (2021). Coping using sex during the coronavirus disease 2019 (COVID-19) outbreak in the United Kingdom. *The Journal of Sexual Medicine*, 18(1), 50-62.
- Herliandry, L. D., & Suban, M. E. (2020). Pembelajaran Pada Masa Pandemi Covid-19. *Jurnal Teknologi Pendidikan*, 22(1), 65–70.
- Ismaniar, I., & Utoyo, S. (2020). "Mirror of Effect" dalam Perkembangan Perilaku Anak pada Masa Pandemi Covid 19. *Diklus: Jurnal Pendidikan Luar Sekolah*, 4(2), 147–157.
- Karjono, M., Bakta, I. M., Karmaya, I. N. M., & Pradnyaparamita, D. (2017). Force, Support, and Endorsing Factors of Early Marriage in Adolescent Sasak (Sasak Ethnic) in Central Lombok. *International Research Journal of Engineering, IT and Scientific Research. https://doi. org/10.21744/irjeis. v3i2*, 43(6).
- Mberu, B. U., & White, M. J. (2011). Internal migration and health: Premarital sexual initiation in Nigeria. *Social science & medicine*, 72(8), 1284-1293. https://doi.org/10.1016/j.socscimed.2011.02.019
- Mcgonagle, D. (2020). Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. *The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information*.
- Nguyen, L. H. (2021). Calculating the impact of COVID-19 pandemic on child abuse and neglect in the U.S. *Child Abuse and Neglect*, 118(May), 105136.
- Puspasari, H. W., & Pawitaningtyas, I. (2020). Masalah Kesehatan Ibu Dan Anak Pada Pernikahan Usia Dini Di Beberapa Etnis Indonesia; Dampak Dan Pencegahannya. *Buletin Penelitian Sistem Kesehatan*, 23(4), 275-283.
- Rahiem, M. D. H. (2021). COVID-19 and the surge of child marriages: A phenomenon in Nusa Tenggara Barat, Indonesia. *Child Abuse and Neglect*, 118(95), 105168.
- Rosramadhana, R., Sudirman, S., & Iqbal, M. (2021). Gender-sensitive approach to adolescent women's overcoming of bullying violence in social media. *Linguistics and Culture Review*, 5(S3), 1276-1284.

- Salih, N. A., Metaferia, H., Reda, A. A., & Biadgilign, S. (2015). Premarital sexual activity among unmarried adolescents in northern Ethiopia: a cross-sectional study. *Sexual & Reproductive Healthcare*, 6(1), 9-13. https://doi.org/10.1016/j.srhc.2014.06.004
- Sarialioğlu, A., Atay, T., & Arıkan, D. (2022). Determining the relationship between loneliness and internet addiction among adolescents during the covid-19 pandemic in Turkey. *Journal of Pediatric Nursing*, 63, 117-124. https://doi.org/10.1016/j.pedn.2021.11.011
- Sarwono, S. W. (2015). Psikologi Remaja (Edisi 17). Rajawali pers.
- Seme, A., Shiferaw, S., Amogne, A., Popinchalk, A., Shimeles, L., Berhanu, E., Mimbela, R., & Giorgio, M. (2021). *Impact of the COVID-19 Pandemic on Adolescent Sexual and Reproductive Health in Ethiopia*.
- Shabrina, C. H., & Nursasi, A. Y. (2018). Correlation between parent-adolescent communication and adolescents' premarital sex risk. *Enfermeria clinica*, 28, 51-54. https://doi.org/10.1016/S1130-8621(18)30036-6
- Sridawruang, C., Crozier, K., & Pfeil, M. (2010). Attitudes of adolescents and parents towards premarital sex in rural Thailand: A qualitative exploration. *Sexual & Reproductive Healthcare*, 1(4), 181-187. https://doi.org/10.1016/j.srhc.2010.06.003
- Starks, T. J., Jones, S. S., Sauermilch, D., Benedict, M., Adebayo, T., Cain, D., & Simpson, K. N. (2020). Evaluating the impact of COVID-19: A cohort comparison study of drug use and risky sexual behavior among sexual minority men in the USA. *Drug and Alcohol Dependence*, *216*, 108260. https://doi.org/10.1016/j.drugalcdep.2020.108260
- Steiner, R. J., Zapata, L. B., Curtis, K. M., Whiteman, M. K., Brittain, A. W., Tromble, E., ... & Fasula, A. M. (2021). COVID-19 and sexual and reproductive health care: findings from primary care providers who serve adolescents. *Journal of Adolescent Health*, 69(3), 375-382. https://doi.org/10.1016/j.jadohealth.2021.06.002
- Toldam, N. E., Graugaard, C., Meyer, R., Thomsen, L., Dreier, S., Jannini, E. A., & Giraldi, A. (2022). Sexual Health During COVID-19: A Scoping Review. *Sexual medicine reviews*. https://doi.org/10.1016/j.sxmr.2022.06.005
- Tu, P., Li, J., Jiang, X., Pei, K., & Gu, Y. (2021). Impact of the COVID-19 pandemic on sexual and reproductive health among women with induced abortion. *Scientific Reports*, 11(1), 16310.
- Zhang, Y., Wen, C., Zhang, Y., Luo, X., & Ma, Z. F. (2021). The impact of mental health and stress concerns on relationship and sexuality amidst the COVID-19 lockdown. *The Journal of Sexual Medicine*, 18(11), 1843-1850.
- Zuo, X., Lou, C., Gao, E., Cheng, Y., Niu, H., & Zabin, L. S. (2012). Gender differences in adolescent premarital sexual permissiveness in three Asian cities: effects of gender-role attitudes. *Journal of Adolescent Health*, *50*(3), S18-S25. https://doi.org/10.1016/j.jadohealth.2011.12.001