

Parents behavior for delivering adolescent reproductive health education

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ABSTRACT

Adolescence is a period of searching for identity that requires information on reproductive health and sexuality so as not to fall into premarital sexual behavior. Parents play an important role in providing reproductive health information to adolescents. The purpose of this study was to analyze the relationship between partner support, perceived barriers, and self-confidence with parents behavior for giving adolescent reproductive health education. The research employed a cross sectional approach which was conducted online in June-August 2020 to 300 parents of teenagers aged 15-19 years. The sampling technique is double sampling using self-administered questionnaire that has been tested for validity. Bivariate analysis was performed using Chi square and multivariate analysis was performed using logistic regression test. The results showed that parents' self-confidence was the most influential factor in reproductive health education for adolescents (OR=3.052, CI=1.534-6.071). Parents who have low self-confidence tend not to provide comprehensive reproductive health information to adolescents. Lack of skills to explain the topic of sexuality, lack of knowledge of the material that will be given, and the shame when conveying sexuality material is something that affects parents' self-confidence. Training is needed for parents on how to provide information on reproductive health to adolescents.

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1. INTRODUCTION

Adolescents are an age group with a fairly large number in the world, reaching 1.2 billion in the world [1]. In Indonesia, there are 16.47% of the population belonging to the category of teenagers aged 10-19 years [2]. Adolescents are also classified as stages that usually have a fairly high curiosity with different needs depending on the stage of the adolescent's development. Assistance efforts for adolescents are needed so that adolescents can make the right decisions regarding their health [3].

If adolescents cannot implement a healthy lifestyle, they will be vulnerable to a health problem. Various health problems are estimated to be the five causes of death in adolescents, one of which is HIV/AIDS [1]. There were 3% of HIV cases in the age group 15-19 years in 2019 in Indonesia. Meanwhile, cases of HIV infection in Central Java are the fourth highest with a total of 5,630 cases [4]. Surakarta City is one of the cities in Central Java with new HIV cases showing an increase, namely in 2018 by 90 cases to 107 cases in 2019 [5], [6].

The majority of adolescents are infected with HIV through sexual transmission [7]. If we look at the data on the reproductive health situation in Indonesia, it was found that adolescents first dated at the age of 15-17 years, and there were 34.5% of male adolescents aged 15-19 years who admitted that they first dated at the

age of less than 15 years. The age that is too young for dating makes adolescents vulnerable to HIV risk behaviors such as premarital sex. The reason why teenagers have premarital sex is that 57.5% of boys are out of curiosity, and for girls the reason is that they are invited or forced by their partners or it just happens. This condition can occur because adolescents still lack knowledge about reproductive health, such as adolescents aged 15-19 years who do not know that one time sexual intercourse can cause pregnancy (31.2% of boys and 35.3% of girls) [8]. Therefore, adolescents need to have sufficient knowledge related to reproductive health, how to prevent HIV, as well as skills not to engage in premarital sex [7].

Information and knowledge of adolescents about reproductive health and sexuality is crucial to strengthen the ability of adolescents to improve their health in the aspect of reproductive health [9]. Research in Myanmar shows that the majority of adolescents have low knowledge of reproductive health so that parental involvement is needed to convey reproductive health information to adolescents [10]. Parents are the right party because parents are one of the sources of information and the closest party to teenagers. Therefore, parents can be a source of reproductive health information to adolescents [11]. The provision of reproductive health information from parents can increase the ability of adolescents to prevent premarital sexual behavior by providing information on the impact of reproductive health, sexually transmitted infections, and the impact of teenage pregnancy [12], [13].

In practice, there are still many parents who have not communicated reproductive health and sexuality to adolescents [14]. Research conducted in Indonesia stated that the provision of reproductive health information from parents to adolescents has several obstacles, whether it is still considered taboo on reproductive health information, lack of parental knowledge, and shyness to discuss reproductive health topics [13], [15]. Parents are also still not confident in providing reproductive health information to teenagers [15], [16]. Parents' confidence in communicating reproductive health to adolescents will have an impact on parents' desire to discuss reproductive health with adolescents.

The desire of parents to communicate with adolescents about reproductive health is also influenced by the obstacles felt by parents. Parents feel embarrassed to talk about reproductive health topics. Parents also think that their teenage children are too young to discuss reproductive health. A less supportive environment such as the lack of support from people around both from partners and the community which is still lacking also makes parents not provide reproductive health information to adolescents [17]. A systematic review of parent-adolescent communication about reproductive health stated the openness of parents to convey reproductive health information also influences adolescents to discuss reproductive health with their parents [18]. Research on reproductive health education from parents to adolescents is more related to the barriers felt by parents and has not been juxtaposed with reinforcing factors and motivations seen from parents' self-confidence and social support [19]–[21]. A Tanzanian study also states that further efforts are needed to increase parental self-confidence. This can be started by examining the relationship between parental self-confidence and reproductive health communication between parents and adolescents [21]. Therefore, further research efforts are needed to analyze relationship and look for the most influential factors between partner support, perceived barriers, and parental self-confidence with parental behavior in providing information on reproductive health and sexuality to adolescents in Surakarta.

2. RESEARCH METHOD

This type of research is analytic observational with a cross sectional approach. The research population is 45,177 parents who have teenage children (15-19 years) in Surakarta with a total sample of 300 samples calculated using the Lemeshow formula for minimum sample. The sampling technique in this study used double sampling which was carried out in June-August 2020. Data collection was carried out online using an online survey platform because at the time of data collection there was a covid-19 pandemic so that this method is deemed appropriate to minimize contact with the wider community which can help prevent covid-19. The independent variable is parental self-confidence which is categorized into high self-confidence (if score ≥ 14), and low (if score < 14) with a cut of point using the median. The next independent variable is the perception of barriers felt by parents in communicating reproductive health and sexuality. Categorization of obstacle perception variables was categorized into high barrier perception (median score ≥ 5.5) and low (median score < 5.5). The last independent variable is the partner's support in providing information on reproductive health and sexuality. Categorization of partner's support includes high (median score ≥ 14) and low (median score < 14). While the dependent variable is the actions of parents in providing reproductive health and sexuality education to their adolescent children (15-19 years) with the categorization of having or not providing comprehensive information on reproductive health and sexuality. Parents who have provided comprehensive reproductive health information are parents who have provided information on how to get along with the opposite sex, values and norms related to reproductive health, gender, reproductive rights, how to access information on reproductive health and sexuality, anatomy and physiology of reproductive health and sexuality, sexual behavior, pregnancy and prevention of unwanted pregnancy, and HIV/AIDS.

The instrument in this study was a questionnaire made by the researcher which includes a questionnaire on self-confidence, perceived barriers, partner support and the practice of providing reproductive health information from parents to adolescents that has been tested for validity and reliability with the Cronbach's Alpha value on parental self-confidence of 0.957, partner support of 0.952, and perceived barriers of 0.965. Data analysis in this study includes univariate analysis, bivariate using chi square, and multivariate using logistic regression. This research has obtained ethical feasibility from the Health Research Ethics Commission (KEPK) Faculty of Medicine UMS No. 2991/B.2/KEPK-FKUMS/VII/2020. Another ethical consideration in this study was that the respondents filled out the questionnaire themselves after being given an explanation of the research objectives. Respondents were also guaranteed confidentiality, and respondents have the right to determine whether or not they were willing to be the research sample.

3. RESULTS AND DISCUSSION

The description of the characteristics of the respondents can be seen in Table 1. The table shows that than half of respondent in this study were male (54%). Meanwhile, in the aspect of the parents' last education level, it was found that the most respondents had high school education level of 154 respondents (51.33%). Then the most parents' occupations are private with 127 respondents (42.33%).

Table 1. Respondent characteristics

Respondent characteristics	Frequency (n)	Percentage (%)
Age of adolescent (years old)		
15	49	16.3
16	54	18
17	58	19.3
18	62	20.7
19	77	25.7
Parents age (years old)		
24-29	2	0.7
30-35	9	3
36-41	49	16.3
42-47	72	24
48-53	91	30.3
54-60	77	25.7
Adolescent gender		
Female	144	48
Male	156	52
Parent gender		
Female	138	46
Male	162	54
Parent education		
Primary school	22	7.34
Junior high school	76	25.33
Senior high school	154	51.33
Diploma	3	1
Bachelor	45	15
Parent job		
Private	127	42.33
Trader	61	20.33
Government employees	31	10.33
Laborer	67	22.33
Housewife	14	4.68

Based on Table 2, it is found that there is a relationship between parental confidence, and partner support with the delivery of reproductive health information to adolescents. However, there is no relationship between the perception of barriers felt by parents and the practice of providing reproductive health information to their adolescent. It was found that parents who had not provided comprehensive information on reproductive health and sexuality tended to have low self-confidence, namely 70 parents (78.7%), low partner support as many as 82 parents (73.9%), and have a low perception of barriers as many as 78 parents (57.4%).

Table 2. Relationship of self-confidence, partner support, and perception of barriers to behavior of providing sexual and reproductive health information to adolescents

Sexual and reproductive health information to adolescents								
Variable	Behavior of giving understanding of reproductive health and sexuality				Total		OR (CI=95%)	P value
	Not comprehensive yet		Comprehensive					
	(n)	(%)	(n)	(%)	(n)	(%)		
Parental confidence								
Low	70	78.7	19	21.3	89	100	5.150	<0.001
High	88	41.7	123	58.3	211	100	(2.894-9.162)	
Partner support								
Low	82	73.9	29	26.1	111	100	4.204	<0.001
High	76	40.2	113	59.8	189	100	(2.515-7.027)	
Perception of barriers								
High	80	48.8	84	51.2	164	100	0.708	0.172
Low	78	57.4	58	42.6	136	100	(0.448-1.119)	

The topics most given to adolescents were pregnancy, pregnancy prevention and HIV/AIDS. Giving this topic is very useful to increase the knowledge of adolescents so that they can prevent HIV risk behavior [22]. Meanwhile, topics that are still not given to adolescents are related to gender and skills to maintain and improve reproductive health status. The topic that is still not given to teenagers is very important, if the material is not provided then the skills of adolescents to prevent premarital sex will be lacking [23]. There are several factors (parental confidence, partner support, and perceived barrier) that can affect the provision of reproductive health information to adolescents which can be seen in Table 3.

Table 3. Odds ratio factors affecting behavior of giving understanding of reproductive health and sexuality to adolescent

Variable	OR 95%CI	p-value
Parental confidence	3.052 (1.534-6.071)	0.001
Partner support	2.330 (1.252-4.335)	0.008

In this study, almost half of the respondents have provided reproductive health information to adolescents, and half have not provided comprehensive reproductive health information. Parents who have provided comprehensive reproductive health information to adolescents are mostly fathers, as well as parents who have a high level of education. The provision of comprehensive reproductive health information has also been conveyed to male adolescents more than girls. Parents will provide reproductive health information to adolescents according to their abilities and gender. Parents will also convey reproductive health information to adolescents in accordance with the needs of adolescents and openness between adolescents and their parents [24], [25]. It can be assumed that teenage boys and fathers in this study are more open to discussing reproductive health issues. Other factors that can influence parents in providing comprehensive reproductive health information can be in the form of parental confidence, as well as partner support according to the results contained in Table 3.

Self-confidence of parent is the most influential factor in providing information on reproductive health and sexuality to adolescents. Parents with low self-confidence have a tendency of 3.052 times not to provide comprehensive information on reproductive health and sexuality to adolescents as presented in Table 3. A person's self-confidence is usually influenced by various things such as a person's perception of the importance of a behavior, and the usefulness of that behavior [26]. In the aspect of providing reproductive health information to adolescents, parental confidence can be affected by limited parental access to reproductive health. In this study, parents who have low self-confidence to convey reproductive health information to adolescents are parents who have low levels of education. A person's level of education will affect a person's level of awareness of health and also a person's knowledge to access health information [27]. Lack of access to this information can make parents still have a negative attitude towards reproductive health education for adolescents [28]. Parents' lack of access to information on reproductive health issues can also affect parents' knowledge about reproductive health. This limited knowledge will also be able to prevent someone from discussing reproductive health issues with adolescents [29].

In this study, there were parents who had high self-confidence in several aspects. Parents believe that they can help their teenage children to solve problems regarding reproductive health and sexuality. Parents also have high confidence to be able to explain reproductive health information using language that is appropriate for the child's age and language that is easily understood by children. The right language or word choice in providing reproductive health information to adolescents is an important thing that can help in communicating

it to adolescents. Parents are expected to talk about sexuality issues in appropriate language and in a situation that is not rigid or non-judgmental [30]. Parents also feel that high self-confidence is supported by a high sense of empathy so that they are able to provide reproductive health education. This empathy is indeed a tip in providing reproductive health information to adolescents. Parents should observe what teenagers feel, see, hear, and experience. Parents should also provide space for teenagers to tell what things are experienced and felt so that teenagers feel that their parents are open and provide opportunities for teenagers to share stories about all things such as reproductive health. [30]. The openness of parents regarding reproductive health issues will affect the youth's desire to discuss sexuality and reproductive health with their parents [18].

However, there are also parents who have low self-confidence who do not understand the use of the right words in explaining reproductive health education to adolescents. In addition, there were also parents who did not have good communication skills to provide reproductive health education. Parents also find it difficult to motivate their children to seek further information on reproductive health. Low parental self-confidence is also felt because parents have never received reproductive health information.

Lack of parental information about reproductive health tends to affect parental knowledge about reproductive health. This will have an impact on parents' ignorance about the right time to provide reproductive health information, as well as techniques for communicating reproductive health problems to adolescents. Lack of parental knowledge about reproductive health will also affect parents' perception that adolescents are still too early to be given reproductive health information [31].

The low self-confidence of parents can also be influenced by lack of communication skills to provide reproductive health information to adolescents. Lack of communication skills regarding reproductive health to adolescents can also be an inhibiting factor in providing reproductive health information to adolescents. If parents are not skilled in communication, adolescents will also judge that parents do not have sufficient knowledge about reproductive health so that adolescents will turn to other parties who are considered comfortable to discuss reproductive health such as friends [32]. If there is limited communication between parents and adolescents about reproductive health and sexuality, it will affect the closeness of communication between adolescents and parents. Parents will also be embarrassed, and afraid to start discussions on reproductive health [33]. Therefore, efforts are needed to increase parental knowledge, as well as parental skills in communicating related to reproductive health to adolescents so that adolescents are comfortable to discuss with their parents.

Partner support is also a factor that influences parents in providing reproductive health information to adolescents. A study of parents' perspectives on sexuality communication to high school adolescents also stated that parents usually exchange ideas about what they will convey to adolescents, as well as issues of sexuality. There is a process of exchanging information between father and mother regarding the topic, they will discuss what material needs to be conveyed to teenagers [34]. Parents will also exchange opinions about which of them is appropriate to convey reproductive health materials to their daughters and sons [16]. Partner support that has been good in this study was they have received support from their partners in the form of motivation to always supervise the association of their teenage children. They have received support from their partners in the form of providing motivation to monitor the development of adolescent reproductive health. Parent's partners have also supported by assisting adolescents in finding additional information on reproductive health and sexuality. Support obtained from partners in the form of information on adolescent relationships, friendships, reproductive health, and reproductive health literacy will be very helpful in discussions on reproductive health among adolescents [35].

Meanwhile, there is also support from partners who are considered low by parents. There are parents who feel that their partners provide inappropriate reproductive health information to adolescents. Parents also feel that their partners do not provide information to them regarding reproductive health materials that must be given to adolescents. Another low partner support is instrumental support, their partners did not provide media containing material on reproductive health and adolescent sexuality. This lack of partner support can occur due to a lack of parental knowledge about reproductive health materials provided to adolescents, and parents do not know how to access appropriate reproductive health information. Efforts are needed to empower parents so that parents have good health literacy related to reproductive health so that they can convey reproductive health information to adolescents [25], [36].

Lack of support from partners will be an obstacle for parents in conveying reproductive health information. Parents in this study felt they did not have enough time to provide reproductive health information. The limited time that parents have to discuss reproductive health can make adolescents discourage their intention to ask their parents about reproductive health problems [31]. Parents are also afraid of negative consequences because society still considers reproductive health material to be a taboo subject. These norms and culture can be an obstacle for parents to communicate reproductive health to adolescents. If the community still considers reproductive health material to be a taboo subject to discuss, parents will be embarrassed if they start discussing the issue [37]. Therefore, communication, information and education are needed to the public

regarding reproductive health because community norms that support the provision of reproductive health education to adolescents relate to the intentions and skills of adolescents not to engage in premarital sex [38].

Another obstacle perceived by parents is the absence of a place to share experiences in providing reproductive health education to adolescents. Friends to share experiences is one of the things that parents need in accessing reproductive health information. Access to reproductive health information is closely related to improving reproductive health communication from parents to adolescents [39]. Access to information is important because limited knowledge about reproductive health becomes an obstacle in providing reproductive health information. If parents' knowledge about reproductive health and sexuality is good, it can improve reproductive health communication between parents and adolescents [10].

4. CONCLUSION

The study found that half of the parents in this study had provided comprehensive reproductive health information to adolescents. Parents who have provided this information have high confidence that they can convey reproductive health information correctly, and also get support from partners whose partners are both committed to providing reproductive health information to adolescents. Parents' ignorance about the material and how to deliver good reproductive health information makes parents feel not confident in providing this information to teenagers. Lack of partner support can also make parents reluctant to convey reproductive health information to adolescents because for parents exchanging information on what needs to be conveyed to their children is an important aspect of communication. Therefore, efforts are needed to provide assistance and training to parents on topics of reproductive health and sexuality for adolescents.

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REFERENCES

- [1] L. S, N. Schwalbe, and L. Solis, "Adolescent Health: The missing population in Universal Health Coverage." Plan International UK, 2019.
- [2] Central Bureau of Statistics, "Total Population by Region, Age Group, and Gender, Indonesia 2020 (Jumlah Penduduk Menurut Wilayah, Kelompok Umur, dan Jenis Kelamin, Indonesia 2020) In Indonesia," Central Bureau of Statistics, Indonesia, 2021.
- [3] WHO, *WHO recommendations on adolescent sexual and reproductive health and rights*. WHO, 2018.
- [4] Ministry of Health Republic of Indonesia, "Center for Data and Information Ministry of Health Republic of Indonesia: HIV/AIDS (Infodatin HIV AIDS) In Indonesia." Ministry of Health Republic of Indonesia, Jakarta, pp. 1–8, 2020.
- [5] Surakarta City Health Office, "Surakarta City Health Profile 2018 (Profil Kesehatan Kota Surakarta Tahun 2018) In Indonesia," Surakarta City Health Office, 2019.
- [6] Surakarta City Health Office, "Surakarta City Health Profile (Profil Kesehatan Kota Surakarta) In Indonesia," Surakarta City Health Office, 2020.
- [7] P. Idele *et al.*, "Epidemiology of HIV and AIDS among adolescents: Current status, inequities, and data gaps," *Journal of Acquired Immune Deficiency Syndromes*, vol. 66, no. SUPPL. 2, 2014, doi: 10.1097/QAI.0000000000000176.
- [8] Center for Data and Information Ministry of Health RI, "Adolescent Reproductive Health Situation (Situasi Kesehatan Reproduksi Remaja) In Indonesia," *Situasi Kesehatan Reproduksi Remaja*. p. 1, 2017.
- [9] J. L. Morris and H. Rushwan, "Adolescent sexual and reproductive health: The global challenges," *International Journal of Gynecology and Obstetrics*, vol. 131, pp. S40–S42, 2015, doi: 10.1016/j.ijgo.2015.02.006.
- [10] Y. T. N. Oo, K. K. Zaw, K. K. Than, T. M. Mg, K. K. Mar, and S. S. Aye, "Do parents and adolescents talk about reproductive health? Myanmar adolescents' perspective," *South East Asia Journal of Public Health*, vol. 1, no. 1, pp. 40–45, 2013, doi: 10.3329/seajph.v1i1.13219.
- [11] T. A. I. Kusumaningrum, N. Rohmawaty, and H. Selena, "Reproductive Health Information from Parents : A Dominant Factor of Voluntary Counselling and Testing (VCT) HIV Intention on Adolescents," *Journal of Medicinal and Chemical Sciences*, vol. 4, pp. 172–182, 2021, doi: 10.26655/JMCHMSCI.2021.2.8.
- [12] L. Widman, R. Evans, H. Javidi, and S. Choukas-Bradley, "Assessment of Parent-Based Interventions for Adolescent Sexual Health: A Systematic Review and Meta-analysis," *JAMA Pediatrics*, vol. 173, no. 9, pp. 866–877, 2019, doi: 10.1001/jamapediatrics.2019.2324.
- [13] D. K. Cahyaningtyas, A. W. Astuti, and U. Hani, "Parents involvement and barriers of programme interventions to reduce adolescent pregnancy," *Journal of Health Technology Assessment in Midwifery*, vol. 3, no. 2, pp. 73–86, 2020, doi: 10.31101/jhtam.1312.
- [14] P. I. G. Sagnia, E. P. Gharoro, and A. R. Isara, "Adolescent-parent communication on sexual and reproductive health issues amongst secondary school students in Western Region 1 of The Gambia," *African journal of primary health care & family medicine*, vol. 12, no. 1, pp. 1–7, 2020, doi: 10.4102/phcfm.v12i1.2437.
- [15] A. Febriana and S. Mulyono, "Parent-Adolescent Communication On Reproductive Health and Sexual Of Adolescent," *Jurnal Keperawatan*, vol. 10, no. 2, pp. 81–85, 2020, doi: 10.22219/jk.v10i2.8063.
- [16] A. Othman *et al.*, "Parent-child communication about sexual and reproductive health: perspectives of Jordanian and Syrian parents," *Sexual and Reproductive Health Matters*, vol. 28, no. 1, 2020, doi: 10.1080/26410397.2020.1758444.
- [17] K. Motsomi, C. Makanjee, T. Basera, and P. Nyasulu, "Factors affecting effective communication about sexual and reproductive health issues between parents and adolescents in zandspruit informal settlement, Johannesburg, South Africa," *Pan African Medical Journal*, vol. 25, pp. 1–7, 2016, doi: 10.11604/pamj.2016.25.120.9208.
- [18] M. Mekie, D. Addisu, A. Melkie, and W. Taklual, "Parent-adolescent communication on sexual and reproductive health issues and its associated factors in Ethiopia: a systematic review and meta-analysis," *Italian Journal of Pediatrics*, vol. 46, no. 1, pp. 1–13,




- 2020, doi: 10.1186/s13052-020-00921-5.
- [19] S. Thongmixay, D. R. Essink, T. de Greeuw, V. Vongxay, V. Sychareun, and J. E. W. Broerse, "Perceived Barriers in Accessing Sexual and Reproductive Health Services for Youth in Lao People's Democratic Republic," *PLoS ONE*, vol. 14, no. 10, pp. 1–16, 2019, doi: 10.1101/656843.
 - [20] M. T. Nu Noe *et al.*, "Barriers between mothers and their adolescent daughters with regards to sexual and reproductive health communication in Taunggyi Township, Myanmar: What factors play important roles?," *PLoS ONE*, vol. 13, no. 12, pp. 1–16, 2018, doi: 10.1371/journal.pone.0208849.
 - [21] L. J. Kajula, N. Sheon, and H. De Vries, "Dynamics of Parent – Adolescent Communication on Sexual Health and HIV / AIDS in Tanzania," *AIDS Behav.*, vol. 18, pp. 69–74, 2014, doi: 10.1007/s10461-013-0634-6.
 - [22] T. A. I. Kusumaningrum and B. A. Sholekhah, "Access to Information on HIV/AIDS for Students at Muhammadiyah University of Surakarta (Akses Informasi Mengenai HIV/AIDS pada Mahasiswa Universitas Muhammadiyah Surakarta) In Indonesia," in *Seminar nasional kesehatan masyarakat UMS*, 2019, pp. 73–85.
 - [23] V. Chandra-Mouli, C. Lane, and S. Wong, "What does not work in adolescent sexual and reproductive health: A review of evidence on interventions commonly accepted as best practices," *Global Health Science and Practice*, vol. 3, no. 3, pp. 333–340, 2015, doi: 10.9745/GHSP-D-15-00126.
 - [24] E. Nurachmah, S. Yona, R. Ismail, Y. Afiyanti, and S. Khariroh, "Adolescent- -parent communication about sexual and reproductive health among junior high school students in five areas with the highest prevalence of HIV in Indonesia : A qualitative study &," *Enfermeria Clinica*, vol. 29, no. Insc 2018, pp. 194–198, 2019, doi: 10.1016/j.enfcli.2019.04.053.
 - [25] B. W. Maina, B. A. Ushie, and C. W. Kabiru, "Parent-child sexual and reproductive health communication among very young adolescents in Korogocho informal settlement in Nairobi, Kenya," *Reproductive Health*, vol. 17, no. 1, pp. 1–14, 2020, doi: 10.1186/s12978-020-00938-3.
 - [26] G. Charness, A. Rustichini, and J. van de Ven, "Self-confidence and strategic behavior," *Experimental Economics*, vol. 21, no. 1, pp. 72–98, 2018, doi: 10.1007/s10683-017-9526-3.
 - [27] V. Raghupathi and W. Raghupathi, "The influence of education on health : an empirical assessment of OECD countries for the period 1995 – 2015," *Archives of Public Health*, vol. 5, pp. 1–18, 2020, doi: 10.1186/s13690-020-00402-5.
 - [28] S. Busi and N. Chea, "Barriers of Discussion Concerning Sexual and Reproductive Health Issues Among Adolescents and Parents, Hawassa, SNNPR, Ethiopia," *Biomedical Journal of Scientific & Technical Research*, vol. 1, no. 7, pp. 1947–1953, 2017, doi: 10.26717/bjstr.2017.01.000591.
 - [29] K. G. Wudineh, F. A. Chekole, and A. A. Tesfu, "Adolescent-parent communication on sexual and reproductive health issues and associated factors among secondary school students in Woreta town, Northwest Ethiopia: An institutional based cross sectional study," *Heliyon*, vol. 7, no. 3, p. e06528, 2021, doi: 10.1016/j.heliyon.2021.e06528.
 - [30] A. M. Ashcraft and P. J. Murray, "Talking to Parents About Adolescent Sexuality," *Pediatric Clinics of North America*, vol. 64, no. 2, pp. 305–320, 2017, doi: 10.1016/j.pcl.2016.11.002.
 - [31] M. S. Yibrehu and B. Mbwele, "Parent - Adolescent communication on sexual and reproductive health: The qualitative evidences from parents and students of Addis Ababa, Ethiopia," *Reproductive Health*, vol. 17, no. 1, pp. 1–9, 2020, doi: 10.1186/s12978-020-00927-6.
 - [32] T. A. Yadeta, H. K. Bedane, and A. K. Tura, "Factors affecting parent-adolescent discussion on reproductive health issues in Harar, eastern Ethiopia: A cross-sectional study," *Journal of Environmental and Public Health*, vol. 2014, 2014, doi: 10.1155/2014/102579.
 - [33] J. Wamoyi, A. Fenwick, M. Urassa, B. Zaba, and W. Stones, "Parent-child communication about sexual and reproductive health in rural Tanzania: Implications for young people's sexual health interventions," *Reproductive Health*, vol. 7, no. 1, pp. 1–18, 2010, doi: 10.1186/1742-4755-7-6.
 - [34] J. M. Grossman, L. J. Jenkins, and A. M. Richer, "Parents ' Perspectives on Family Sexuality Communication from Middle School to High School," *International Journal of Environmental Research and Public Health*, vol. 15, no. 1, p. 107, 2018, doi: 10.3390/ijerph15010107.
 - [35] UNESCO, *International Technical Guidance on Sexuality Education*. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO), 2018.
 - [36] M. Zakaria, J. Xu, F. Karim, and F. Cheng, "Reproductive health communication between mother and adolescent daughter in Bangladesh: a cross-sectional study," *Reproductive health*, vol. 16, no. 1, p. 114, 2019, doi: 10.1186/s12978-019-0778-6.
 - [37] A. K. Abdallah, R. J. Magata, and J. N. Sylvester, "Barriers to parent-child communication on sexual and reproductive health issues in East Africa: A review of qualitative research in four countries," *Journal of African Studies and Development*, vol. 9, no. 4, pp. 45–50, 2017, doi: 10.5897/jasd2016.0410.
 - [38] M. L. A. Ghaffar and T. A. I. Kusumaningrum, "Relationship between Social Norms and Peer Support for Sexual Abstinence in Adolescents (Hubungan Norma Sosial dan Dukungan Teman Sebaya terhadap Niat Pantang Perilaku Seksual pada Remaja) In Indonesia," *Jurnal Ilmu Kesehatan Masyarakat Berkala*, vol. 3, no. 1, pp. 70–79, 2021, doi: 10.32585/jikemb.v3i1.1615.
 - [39] V. Vongsavanh, V. T. H. Lan, and V. Sychareun, "Sexual and reproductive health communication between parents and high school adolescents in Vientiane Prefecture, Lao PDR," *Global Health Action*, vol. 13, no. sup2, 2020, doi: 10.1080/16549716.2020.1785145.

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