# **Research Paper** Barriers to the Father-adolescent Sexual Communication: A Cross-sectional Study

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## ABSTRACT

**Background and Purpose:** The majority of research on parent-adolescent sexual communication has predominantly focused on mothers, leaving fathers' involvement in this matter largely unexplored. Therefore, this study seeks to identify the obstacles hindering sexual communication between fathers and adolescents.

**Materials and Methods:** This cross-sectional study was performed on 196 fathers of adolescents aged 15 to 19 from August 2020 to January 2021 in northern Iran. A socio-demographic medical information form, a culturally validated parent-adolescent sexual communication barriers questionnaire, and the sexual communication topics between parents and adolescents were used to gather information. A logistic regression test was administered using SPSS software, version 18 to determine the barriers to sexual communication.

**Results:** The mean age was 47.38±5.04 for fathers, 16.79±1.46 for boys, and 17.00±1.30 for girls. The prevalence of father-girl sexual communication (51.1%) was lower than that of father-boy sexual communication (55.8%). The most frequent barriers to fathers' sexual communication with both genders were the adolescent's embarrassment and the possibility of provoking their curiosity about sex. The logistic regressions showed that adolescents' embarrassment and not trusting them and approving of them having sex were barriers to father-adolescent sexual communication (P<0.001). Conversely, adolescents asking more private questions were positive predictors of father-adolescent sexual conversation (P<0.001).

**Conclusion:** The findings underscore the prevalence of adolescent embarrassment and concerns about sparking curiosity about sex as key obstacles to such communication. Additionally, the results highlight the importance of adolescents feeling trusted and supported by their fathers in discussing sexual topics. These insights emphasize the need for targeted interventions to address these barriers and promote healthier, more open communication between fathers and adolescents regarding sexual matters.

Keywords: Communication, Sexual topics, Fathers, Adolescents

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## Introduction

A

s a crucial stage in human development, adolescence is accompanied by changes in social, sexual, emotional, and cognitive functions [1]. These alterations cause adolescents to develop new demands, in-

cluding sex education [2]. Various studies demonstrate that education related to sexual issues and reproductive health is conveyed through parent-adolescent sexual communication. Also, parents should talk about sex early and through multiple topics. They also advised parents to be open, honest, and realistic [3-7].

Sexual communication refers to the verbal and non-verbal exchange of feelings and thoughts about sexual issues such as sex education, the prevention of sexually transmitted infections, unintended pregnancies, and sexual violence [8, 9]. This instrument is primary and essential to transfer parents' values, beliefs, knowledge, and expectations to teenagers regarding sexual issues [10]. Sexually risky behaviors among adolescents remain a major problem worldwide [11]. Studies show that parent-adolescent sexual communication effectively prevents high-risk sexual behaviors at an early age [12, 13]. Nevertheless, fathers may tend to talk to their children about sexual issues when they enter a romantic relationship [14, 15], or they may refrain from talking due to limited knowledge about sexual health and discomfort discussing sexual matters [16, 17]. However, research has indicated that delaying sexual communication increases the probability of engaging in sexual activity at a younger age [18-20] and leads to acquiring conflicting information and values from peers and the Internet [21-25].

The prevalence of sexual communication between parents and adolescents varies in different countries with different cultures. Research reveals that 90% of American adolescents discuss sex-related topics with their parents [14], whereas it is 33% in Mexico [26] and 17% in Nigeria [27]. Additionally, the prevalence of parentadolescent sexual communication varies depending on the adolescent's gender, so it is more likely that fathers have sexual communication with their sons than with their daughters [4]. On the other hand, fathers might discuss their daughters about menstruation two times more than they talk about it to their sons, while they speak of ejaculation and condom use to their daughters 60% less than they talk about it to their sons [26].

In addition to addressing the existing research gap concerning father-adolescent communication, it is pertinent to acknowledge the absence of studies examining barriers to such communication from the father's perspective. While previous research has predominantly focused on maternal involvement in sexual communication with adolescents, there remains a significant knowledge gap regarding the unique challenges and obstacles faced by fathers in engaging in these conversations. This study aims to fill this void by identifying and exploring various barriers hindering sexual communication between fathers and adolescents. Specifically, this research will delve into barriers such as knowledge gaps, feelings of embarrassment, and perceived deficiencies in parenting skills that may impede fathers' ability to communicate with their teenage children about sexual topics effectively. By comprehensively examining these barriers, this study seeks to provide valuable insights into how interventions and support mechanisms can be tailored to enhance father-adolescent sexual communication and promote healthier relationships within families.

Therefore, investigating the sexual communication between fathers and adolescents can partially deepen our knowledge of this issue in various communities, particularly developing countries. Consequently, this study intended to determine the barriers to sexual communication between fathers and adolescents.

## **Materials and Methods**

## Study design

This cross-sectional study, recruiting fathers of adolescent children covered by health centers in Sari, northern Iran, was conducted between August 2020 and January 2021.

#### Sample size

Assuming P=50% (prevalence of parent-adolescent sexual communication), Z=1.96 (95% confidence interval [CI]), d=0.05 (margin of error), and 10% sample attrition (because of excluding samples during the study), the number of the initial samples was calculated 210 based on the Equation 1:

1. n=
$$\frac{Z(1-\alpha)^2)P(1-P)}{d^2}$$

## Sampling method

Using a random number table, the researchers selected 30 health facilities from the 133 centers in Sari's West, East, and Central regions. Then, they obtained the list of households with at least one adolescent (girl or boy) from each center and contacted 210 fathers via phone based on the random sampling method (i.e. using a random number table). Fathers who met the inclusion criteria were invited to complete the self-report questionnaires in person at the health centers.

#### Inclusion and exclusion criteria

The inclusion criteria included fathers having at least one 15- to 19-year-old adolescent child (girl or boy) and having elementary literacy, whereas the exclusion criterion was single-parent households.

#### Measurements

The socio-demographic information form asks questions about the adolescent's age and gender and the father's education, employment status, sources of information, satisfaction with the family's socioeconomic class, and alcohol or drug use.

The researcher-constructed scale, "parent-adolescent sexual communication topics," contains 23 phrases with a 3-point Likert scale (including never: 1, sometimes: 2, and often: 3). The sum of the scores ranges from 23 to 69. The content validity of this scale was assessed and approved using the opinion of 10 experts (3 psychologists, 4 psychiatrists, and 3 professors in midwifery). The researchers measured its reliability in a two-stage study with 20 fathers who completed the questionnaire at a two-week interval. The Cronbach  $\alpha$  of both stages was 0.96 with a correlation coefficient of 0.99 (P<0.01), indicating the acceptable reliability of the scale [28]. In the present study, a score equal to the median (median=30) and below was considered the lack of sexual communication between fathers and adolescents [29].

The barriers to parent-adolescent sexual communication questionnaire, with 17 items, was developed by Jaccard et al. [30]. The researchers measured the reliability of this questionnaire in a two-stage study with 20 fathers who completed the questionnaire at a two-week interval. The Cronbach  $\alpha$  was 0.92 at the first stage and 0.90 at the second stage, with a correlation coefficient of 0.99 (P<0.01), indicating the acceptable reliability of the questionnaire. Also, the validity and reliability of this questionnaire were assessed and proved in Iran [31].

#### Data analysis

Data analysis was done using SPSS software version 18, calculating the Mean±SD, frequency, and percentage. Moreover, the logistic regression test was run at a significance level 0.05.

#### Results

In the present study, 13 fathers declined to participate despite the initial agreement and many phone followups. Overall, 196 questionnaires were completed (93% response rate). Among the participants, 104 fathers (53%) had sons, and 92(47%) had daughters. The mean age was 47.38±5.04 for fathers, 16.79±1.46 for boys, and 17.00±1.30 for girls. Table 1 summarizes the demographic features of the participants.

Overall, 88 participants (44.9%) reported father-adolescent sexual communication. The frequency of fatherdaughter communication was 51.1%, whereas that of father-son communication was 55.8%. The results show that the most discussed sexual topic between father and son is puberty changes (29.8%), while it is about prevention from sexual abuse (21.7%) between father and daughter. According to the findings, 91.3% of fathers have never talked to their sons, and 97.8% have never spoken to their daughters about high-risk sex.

According to Table 2, most fathers (47.4%) considered puberty the most appropriate time to start sexual communication with a teenager, and the main reason was the father's initiative (74.9%). Based on the findings, fathers believed that the three main barriers to father-son sexual communication included creating a sense of curiosity in the adolescents (54.8%), embarrassing them (45.2%), and approving the sexual relationship (40.4%). In addition, they declared that three significant barriers in their sexual communication with their daughters included embarrassing the adolescent (73.9%), creating a sense of curiosity in the adolescent because they obtained the information from other sources (54.4%).

Investigating the predictors of sexual communication between fathers and adolescents using logistic regression demonstrated that the odds of sexual communication were 86% less in fathers who believed that talking about sexual topics would embarrass their children, 65% less in fathers who believed if they talked to their children about sexual health topics, they would think that they approved of them having sex, and 71% less in fathers who believed if they talked to their children about sexual issues, they felt they did not trust them. According to the study results, the odds of father-adolescent sexual communication in fathers, who believe that if they talked to their children about sexual issues, they might ask more private questions, were five times more than others (Table 3).

Variak	No. (%)	
Education	Diploma and below	103(52.5)
Education	Higher education	93(47.5)
	Employee	50(25.5)
Occupation	Worker/Farmer	38(19.4)
Occupation	Self-employed	97(49.5)
	Retired	11(5.6)
Satisfaction with the socioeconomic level	Not at all	73(37.3)
	To some extent	100(51)
	Completely satisfied	23(11.7)
	Radio & TV/Book	32(16.4)
Father's sources of information	Internet/virtual networks	31(15.8)
	Self-employed Retired Not at all vel To some extent Completely satisfied Radio & TV/Book	53(27)
	More than one information source	80(40.8)
Alcohol or drug use	Yes	40(20.4)
Alconol of drug use	No	156(79.6)
	1 <sup>st</sup> born	117(59.7)
Childbirth order	2 <sup>nd</sup> born	51(26)
	3 <sup>rd</sup> born	28(14.3)

Table 1. Demographic characteristics of the fathers (n=196)

#### Discussion

In the discussion, the findings underscore the prevalence of father-adolescent sexual communication, albeit at varying frequencies between father-daughter and father-son dyads. The topics discussed also differed, with puberty changes dominating conversations with sons, while prevention from sexual abuse was more prevalent in discussions with daughters. Notably, a significant portion of fathers had not broached the topic of high-risk sexual behavior with their adolescent children, indicating potential communication gaps that may leave adolescents vulnerable.

The timing and initiation of sexual communication were largely attributed to the father's initiative around the onset of puberty. Identified barriers to communication included concerns about embarrassing the adolescent, fostering curiosity, and perceptions of approval or trust. Logistic regression analysis revealed that these barriers significantly influenced the likelihood of engaging in sexual communication, highlighting the need for targeted interventions to address them and facilitate more open and effective dialogue between fathers and adolescents about sexual matters.

Father-child sexual communication, as one of the main pillars of communication on sexual topics in families, depends on various factors in the socio-cultural context of the societies [32]. The present study investigated the barriers to sexual communication between fathers and adolescents. Since few studies have been conducted in this field, it can expand the depth of our knowledge about this issue.

The results show that less than half of the fathers have sexual communication with their children, whereas Dessie et al. [33] demonstrate that it is 30.9%, less than the prevalence obtained in the present study. In the current study, the most sexual communication between

Barriers to Father-adolescent Communication on Sexual Issues		No. (%)		
		Father-daughter		
1. I don't have enough information about sexual issues to talk about it with my child.	17(16.4)	21(22.8)		
2- It embarrasses me to talk about sexual issues with my child.	22(21.1)	39(42.4)		
3. Talking to my child about sexual issues makes them embarrassed.	47(45.2)	68(73.9)		
4. If I try to talk to my children about sexual issues, they will not take me seriously.	24(23.1)	27(29.3)		
5. If I talk to my children about sexual issues, it will be difficult for me to explain things.	35(33.7)	39(42.4)		
6. I don't need to talk with my children about sexual issues because they can get information somewhere else.	34(32.7)	50(54.4)		
7. Talking about sexual issues does not help my child.	7(6.7)	9(9.8)		
8. If I talk with my children about sexual issues, they may not be honest with me.	13(12.5)	12(13)		
9. If I talk with my children about sexual issues, they think I don't trust them.	20(19.3)	29(31.5)		
10. It is difficult for me to find a convenient time and place to talk to my child about sexual issues.	25(24)	26(28.2)		
11. I am so busy that I don't have the time to talk to my child about sexual issues.	17(16.3)	20(21.7)		
12. If I talk with my children about sexual issues, they may ask me more personal questions.	20(19.2)	11(12)		
13. My child is not interested in talking about sexual issues.	24(23.1)	33(35.9)		
14. If my child and I want to talk about sexual issues, we may only argue.	17(16.3)	15(16.3)		
15. If I talk to my children about sexual issues, they may ask me something that I do not know the answer to.	21(20.2)	16(17.4)		
16. If I talk to my children about sexual issues, they think I approve of them having sex.	42(40.4)	47(51.1)		
17. Talking to my children about sexual issues will make them more curious.	57(54.8)	66(71.8)		

Table 2. Absolute and relative frequency distribution of barriers to father-adolescent communication on sexual issues (n=196)

fathers and sons was about puberty and its changes, which is in line with the findings of Lehr et al. [34]. They revealed a relationship between the boys' pubertyrelated growth and development and the amount of father-son sexual communication. According to the results, the topics discussed between fathers and daughters are primarily about how to prevent sexual abuse. This finding is consistent with Miller et al., declaring that fathers are more willing to talk to girls about their partner's pressure to have sex [35]. Similar to other studies [19, 24], most fathers believe that the most appropriate time to start sexual communication with a teenager is during early puberty (10-13 years old) and middle (14-17 years old), and the main reason that triggers sexual communication with a teenager is the father's initiative [19, 36]. Thus, fathers must create a more open atmosphere in the family so that teenagers can freely raise their questions and concerns regarding sexual issues.

Consistent with Jaccard et al. [30], fathers believe that one of the main barriers to sexual communication with their children is the adolescent's embarrassment. Another barrier is that they think talking to teenagers about such issues approves of them having sex; therefore, they refuse to talk about sex with their children [37, 38]. Similar to previous literature [39, 40], fathers state that it is difficult to discuss sexual issues with their children. Hence, their inability to communicate with their children and initiate a conversation should be considered in programs to improve their communication skills.

In this study, 25% of fathers declare that talking about sexual issues may make teenagers think that they do not trust them. This concern has resulted in a 71% decrease in the probability of father-adolescent sexual communication, although it may not be only for parents. Correspondingly, Cederbaum et al. [41] report

Independent Variables	Independent Variables	Crude Odds Ratio (OR)	S.E	Adjusted OR	Ρ	95% CI of the Adjusted OR
Constant		0.504	1.096	1.655	0.646	-
Father education	Diploma and below Higher education	Reference -0.004	0.525	0.996	0.994	0.356-2.786
Father's satisfaction with the socioeconomic level	No Yes	Reference 0.0517	0.470	1.676	0.272	0.667-4.212
Child gender	Girl Boy	Reference 0.295	0.570	1.343	0.605	0.439-4.107
Sexual communication conveys distrust of the child	Disagree Agree	Reference -1.245	0.590	0.288	0.035	0.091-0.914
Child embarrassment	Disagree Agree	Reference -1.928	0.487	0.142	<0.001	0.056-0.378
A child asking more per- sonal questions.	Disagree Agree	Reference 1.461	0.582	5.059	0.012	1.376-13.492
Sexual communication conveys approval of the child having sex	Disagree Agree	Reference -0.969	0.423	0.351	0.022	0.166-0.870

Table 3. Logistics regression of factors related to father-adolescent sexual communication

that girls avoid talking to their mothers about sex out of fear of losing their trust.

In contrast to Jaccard et al. [30], this study reveals that fathers who believe their teenagers will ask them more personal questions when discussing sexual issues talk about sexual matters with their children five times more than others. Research shows that adolescents' access to various information sources regarding sexual and reproductive health is related to the increased probability of sexual communication with their parents, and this knowledge can prime them to communicate and initiate such conversation [42]. Therefore, it seems that raising private questions by adolescents leads to increased participation in sexual communication, resulting in the maintenance of adolescent-father sexual communication.

## Conclusion

The present study investigated father-adolescent sexual communication, the discussed sexual topics, the barriers, and the related factors. Identifying the current situation by considering obstacles such as the adolescents' embarrassment, fathers' concern about adolescents becoming curious about sex, and the difficulty of talking about sexual topics for fathers can be helpful for the policymakers to develop effective counseling and psychological interventions for the adolescents' health. This will create a more suitable space for fathers and teenagers, especially fathers and daughters, and facilitate such family communication.

#### **Study limitations**

Like any other study, this study was subjected to some limitations. First, the sexual communication between fathers and adolescents was measured only based on the answers provided by the fathers. Moreover, the cultural sensitivity to the research questions might have caused information bias. Finally, cause and effect relationships could not be established between the investigated variables due to the study's cross-sectional nature.

## **Ethical Considerations**

#### **Compliance with ethical guidelines**

The study protocol was performed according to the Helsinki Declaration. Informed consent was obtained

from the participants. Written informed consent was obtained from the participants for publication and any accompanying images. The Ethics Committee of Mazandaran University of Medical Sciences approved this study (Code: IR.MAZUMS.REC.1398.1281).

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#### Authors contributions

All authors equally contributed to preparing this article.

#### Conflict of interest

The authors declared no conflict of interest.

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#### References

- Alimoradi Z, Kariman N, Simbar M, Ahmadi F. Empowerment of adolescent girls for sexual and reproductive health care: A qualitative study. African Journal of Reproductive Health. 2017; 21(4):80-92.
   [DOI:10.29063/ajrh2017/v21i4.9] [PMID]
- [2] Latifnejad Roudsari R, Javadnoori M, Hasanpour M, Hazavehei SM, Taghipour A. Socio-cultural challenges to sexual health education for female adolescents in Iran. Iranian Journal of Reproductive Medicine. 2013; 11(2):101-10. [PMID]
- [3] Beckett MK, Elliott MN, Martino S, Kanouse DE, Corona R, Klein DJ, et al. Timing of parent and child communication about sexuality relative to children's sexual behaviors. Pediatrics. 2010; 125(1):34-42. [DOI:10.1542/peds.2009-0806] [PMID] [PMCID]
- [4] Jorfizadeh H, Makvandi B, Heidari A, Asgari P. Psychological wellbeing in adolescents: Examining the mediating role of self-differentiation and sexual intimacy of mothers. Iranian Journal of Health Sciences. 2023; 11(4):249-58. [DOI: 10.32598/ijhs.11.4.740.2]
- [5] Pariera KL, Brody E. "Talk more about it": Emerging adults' attitudes about how and when parents should talk about sex. Sexuality Research and Social Policy. 2018; 15:219-29. [Link]
- [6] Astle S, Rivas-Koehl D, Rivas-Koehl M, Mendez S. Timing the talks: Exploring children's ages at parent-child conversations about gender, sexual orientation, and various sexual behaviors. Sexuality Research and Social Policy. 2024; 21:738-58. [DOI:10.1007/s13178-023-00894-0]
- [7] Wisnieski D, Sieving R, Garwick A. Parent and family influences on young women's romantic and sexual decisions. Sex Education. 2015; 15(2):144-57. [DOI:10.1080/14681811.2014.986798]

- [8] Davis AN, Gahagan JC, George C. "Everyone just keeps their eyes closed and their fingers crossed": Sexual health communication among black parents and children in Nova Scotia, Canada. International Journal for Equity in Health. 2013; 12:55. [DOI:10.1186/1475-9276-12-55] [PMID] [PMCID]
- [9] Kusheta S, Bancha B, Habtu Y, Helamo D, Yohannes S. Adolescentparent communication on sexual and reproductive health issues and its factors among secondary and preparatory school students in Hadiya Zone, Southern Ethiopia: Institution based cross sectional study. BMC Pediatrics. 2019; 19(1):9. [DOI:10.1186/s12887-018-1388-0] [PMID] [PMCID]
- [10] de Looze M, Constantine NA, Jerman P, Vermeulen-Smit E, ter Bogt T. Parent-adolescent sexual communication and its association with adolescent sexual behaviors: A nationally representative analysis in the Netherlands. The Journal of Sex Research. 2015; 52(3):257-68. [DOI:10.1080/00224499.2013.858307] [PMID]
- [11] Nattabi J, Nabunya P, Kizito S, Nabayinda J, Kiyingi J, Ssewamala F. The impact of parent-adolescent communication on reduction of sexual risk possibility among adolescents: Findings from the suubi-maka study. Archives of Sexual Behavior. 2023; 52(8):3521-30. [PMID]
- [12] Sneed CD, Tan HP, Meyer JC. The influence of parental communication and perception of peers on adolescent sexual behavior. Journal of Health communication. 2015; 20(8):888-92. [DOI:10.1080/10 810730.2015.1018584] [PMID]
- [13] Widman L, Choukas-Bradley S, Noar SM, Nesi J, Garrett K. Parent-adolescent sexual communication and adolescent safer sex behavior: A meta-analysis. JAMA Pediatrics. 2016; 170(1):52-61. [DOI:10.1001/jamapediatrics.2015.2731] [PMID] [PMCID]
- [14] Edwards LL, Hunt A, Cope-Barnes D, Hensel DJ, Ott MA. Parent-child sexual communication among middle school youth. The Journal of Pediatrics. 2018; 199:260-2. [DOI:10.1016/j. jpeds.2018.02.041] [PMID]
- [15] Eisenberg ME, Sieving RE, Bearinger LH, Swain C, Resnick MD. Parents' communication with adolescents about sexual behavior: A missed opportunity for prevention? Journal of Youth and Adolescence. 2006; 35:893-902. [DOI:10.1007/s10964-006-9093-y]
- [16] Donahue KL, D'Onofrio BM, Bates JE, Lansford JE, Dodge KA, Pettit GS. Early exposure to parents' relationship instability: Implications for sexual behavior and depression in adolescence. The Journal of Adolescent Health. 2010; 47(6):547-54. [DOI:10.1016/j.jadohealth.2010.04.004] [PMID] [PMCID]
- [17] Malacane M, Beckmeyer JJ. A review of parent-based barriers to parent-adolescent communication about sex and sexuality: Implications for sex and family educators. American Journal of Sexuality Education. 2016; 11(1):27-40. [DOI:10.1080/15546128.2016.1146 187]
- [18] Javadnoori M, Roudsari RL, Hasanpour M, Hazavehei SM, Taghipour A. Female adolescents' experiences and perceptions regarding sexual health education in Iranian schools: A qualitative content analysis. Iranian Journal of Nursing and Midwifery Research. 2012; 17(7):539-46. [PMID]
- [19] Manu AA, Mba CI, Asare GQ, Odoi-Agyarko K, Asante RK. Parentchild communication about sexual and reproductive health: Evidence from the Brong Ahafo region, Ghana. Reproductive Health. 2015; 12:16. [DOI:10.1186/s12978-015-0003-1] [PMID] [PMCID]
- [20] Soliemaninia L, Jazayeri A, Mohammadkhani P. The Role of Positive and Negative Mental Health in Adolescent's Health Risk Behaviors. Social Welfare Quarterly. 2006; 5(19):75-90. [Link]

- [21] Ahmadi K, Khodadadi Sangdeh J, Aminimanesh S, Mollazamani A, Khanzade M. The role of parental monitoring and affiliation with deviant peers in adolescents' sexual risk taking: Toward an interactional model. International Journal of High Risk Behaviors & Addiction. 2013; 2(1):22-7. [DOI:10.5812/ijhrba.8554] [PMID] [PMCID]
- [22] Alimoradi Z, Kariman N, Simbar M, Ahmadi F. Contributing factors to high-risk sexual behaviors among Iranian adolescent girls: A systematic review. International Journal of Community Based Nursing and Midwifery. 2017; 5(1):2-12. [PMID]
- [23] Epstein M, Ward LM. "Always use protection": Communication boys receive about sex from parents, peers, and the media. Journal of Youth and Adolescence. 2008; 37:113-26. [DOI:10.1007/s10964-007-9187-1]
- [24] Garmaroudi GR, Makarem J, Alavi S, Abbasi Z. [Health related risk behaviors among high school students in Tehran, Iran (Persian)]. Payesh. 2010; 9(1):13-9. [Link]
- [25] Werner-Wilson RJ, Fitzharris JL, Morrissey KM. Adolescent and parent perceptions of media influence on adolescent sexuality. Adolescence. 2004; 39(154):303-13. [PMID]
- [26] Atienzo EE, Ortiz-Panozo E, Campero L. Congruence in reported frequency of parent-adolescent sexual health communication: A study from Mexico. International Journal of Adolescent Medicine and Health. 2015; 27(3):275-83. [DOI:10.1515/ijamh-2014-0025] [PMID]
- [27] Amoran OE, Onadeko MO, Adeniyi JD. Parental influence on adolescent sexual initiation practices in Ibadan, Nigeria. International Quarterly of Community Health Education. 2003; 23(1):73-81. [DOI:10.2190/U8VJ-0UFE-HRYU-J48L]
- [28] Nabavi HS, Ganji J, Mohammadpour RA, Shahhosseini Z. Prevalence of Sexual health dialogue between mothers and adolescents and associated factors in Sari, Iran 2020. Journal of Mazandaran University of Medical Sciences. 2022; 32(215):131-42. [Link]
- [29] Noe MTN, Saw YM, Soe PP, Khaing M, Saw TN, Hamajima N, 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. 2018; 13(12):e0208849. [DOI:10.1371/journal.pone.0208849] [PMID] [PMID]
- [30] Jaccard J, Dittus PJ, Gordon VV. Parent-teen communication about premarital sex: Factors associated with the extent of communication. Journal of Adolescent Research. 2000; 15(2):187-208. [DOI:10.1177/0743558400152001]
- [31] Ahari SB, Moghadam ZB, Azin SA, Montazeri A, Maasoumi R, Pedram J. Evaluation of effectiveness of a sexuality education program for parents of male adolescents: Promoting of parentadolescent sexual communication. International Journal of Adolescent Medicine and Health. 2022; 34(4):249-56. [DOI:10.1515/ ijamh-2020-0079] [PMID]
- [32] Grossman JM, Richer AM. A longitudinal look at family communication about sexual issues. Sexes. 2022; 3(1):164-77. [DOI:10.3390/ sexes3010013]
- [33] Dessie Y, Berhane Y, Worku A. Parent-adolescent sexual and reproductive health communication is very limited and associated with adolescent poor behavioral beliefs and subjective norms: Evidence from a community based cross-sectional study in Eastern Ethiopia. Plos One. 2015; 10(7):e0129941. [DOI:10.1371/journal. pone.0129941] [PMID] [PMCID]

- [34] Lehr ST, Demi AS, Dilorio C, Facteau J. Predictors of father-son communication about sexuality. Journal of Sex Research. 2005; 42(2):119-29. [DOI:10.1080/00224490509552265] [PMID]
- [35] Miller KS, Fasula AM, Dittus P, Wiegand RE, Wyckoff SC, McNair L. Barriers and facilitators to maternal communication with preadolescents about age-relevant sexual topics. AIDS and Behavior. 2009; 13(2):365-74. [DOI:10.1007/s10461-007-9324-6] [PMID]
- [36] Grossman JM, Richer AM. Parents' perspectives on talk with their adolescent and emerging adult children about sex: A longitudinal analysis. Sexuality Research & Social Policy. 2023; 20(1):216-29. [DOI:10.1007/s13178-021-00656-w] [PMID] [PMCID]
- [37] Bekele D, Deksisa A, Abera W, Megersa G. Parental communication on sexual and reproductive health issues to their adolescents and affecting factors at Asella town, Ethiopia: A community-based, cross-sectional study. Reproductive Health. 2022; 19(1):114. [DOI:10.1186/s12978-022-01408-8] [PMID] [PMCID]
- [38] Hyde A, Drennan J, Butler M, Howlett E, Carney M, Lohan M. Parents' constructions of communication with their children about safer sex. Journal of Clinical Nursing. 2013; 22(23-24):3438-46. [DOI:10.1111/jocn.12367] [PMID]
- [39] Jerman P, Constantine NA. Demographic and psychological predictors of parent-adolescent communication about sex: A representative statewide analysis. Journal of Youth and Adolescence. 2010; 39(10):1164-74. [DOI:10.1007/s10964-010-9546-1] [PMID] [PMCID]
- [40] Randolph SD, Coakley T, Shears J, Thorpe Jr RJ. African-American fathers' perspectives on facilitators and barriers to father-son sexual health communication. Research in Nursing & Health. 2017; 40(3):229-36. [DOI:10.1002/nur.21789] [PMID] [PMCID]
- [41] Cederbaum JA. The experience of sexual risk communication in African American families living with HIV. Journal of Adolescent Research. 2012; 27(5):555-80. [DOI:10.1177/0743558411417864] [PMID] [PMID]
- [42] Vongsavanh V, Lan VTH, Sychareun V. Sexual and reproductive health communication between parents and high school adolescents in Vientiane Prefecture, Lao PDR. Global Health Action. 2020; 13(sup2):1785145. [DOI:10.1080/16549716.2020.1785145]
   [PMID] [PMID]