

Original Paper


# Students' Perspective on Factors Influencing Premarital Sexual Intercourse



Mohtasham Ghaffari<sup>1</sup>, Sakineh Rakhshanderou<sup>2</sup>, Zabihollah Gharlipour<sup>3\*</sup>, Farideh Khalajabadi Farahani<sup>4</sup>, Tahereh Ramezani<sup>5</sup>, Fatemeh Izadkhan<sup>6</sup>


1. Professor, Department of Public Health, School of Health, ShahidBeheshti University of Medical Sciences, Tehran, Iran.
2. Assistant Professor, Department of Public Health, School of Health, ShahidBeheshti University of Medical Sciences, Tehran, Iran.
3. Associate Professor, Department of Health Education and Promotion, School of Health, Qom University of Medical Sciences, Qom, Iran.
4. Associate Professor, Department of Population, Health and Family Planning, Population Studies and Research Centre in Asia and the Pacific, Tehran, Iran.
5. PhD Candidate in Gerontology, Department of Aging, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.
6. MSc Student in Health Education & Promotion, Department of Health Education and Promotion, School of Health, Qom University of Medical Sciences, Qom, Iran.

Use your device to scan and read the article online



**Citation** Ghaffari M, Rakhshanderou S, Gharlipour Z, Khalajabadi Farahani F, Ramezani T, Izadkhan F. Students' Perspective on Factors Influencing Premarital Sexual Intercourse. *J Holist Nurs Midwifery*. 2020; 30(2):111-119. <https://doi.org/10.32598/jhnm.30.2.111>

**Running Title** Factors Influencing Premarital Sexual Intercourse

 <https://doi.org/10.32598/jhnm.30.2.111>



## Article info:

Received: 12/10/2019

Accepted: 01/15/2020

Available Online: 01/04/2020

## Keywords:

Premarital sexual behavior,  
Youth, Qualitative research

## ABSTRACT

**Introduction:** Early initiation of sex increases the risks of unprotected sex, multiple partners, and sexually transmitted infections. The effective factors of premarital sexual intercourse have not been widely studied.

**Objective:** This study aimed at identifying environmental factors influencing premarital sexual intercourse from the Iranian youths' perspective.

**Materials and Methods:** Using a qualitative content analysis method, we carried out on students of the Payame Noor University of Shiraz, Iran. A total of 30 single male and female students were selected using a purposive sampling method. Semi-structured interviews were used to collect data. The obtained data were analyzed via thematic analysis. Participation in the study was voluntary with informed consent.

**Results:** Seven teen subjects were male, and 13 were female. Analysis of the transcripts yielded 5 main categories: Culture, Socio-economic status, Family, Media, and Friends, and Peers. The sub-categories were acculturation, cultural norms, economic problems, heavy dowry, availability of unhealthy options, family support, family values and norms, control and supervision, parent-child relationship, satellite, Internet, friends, and peer pressure, and lack of resistance to peer and friends' influence.

**Conclusion:** The educational programs and interventions should emphasize the role of cultural factors and family support and monitoring by families to help correct sexual orientation and healthy behaviors among adolescents. Furthermore, training programs should consider the negative impacts of western media and the effects of peer pressure on the formation and correction of premarital sexual behavior.

## \* Corresponding Author:

Zabihollah Gharlipour, PhD.

Address: Department of Health Education and Promotion, School of Health, Qom University of Medical Sciences, Qom, Iran.

Tel: +98 (253) 7833595

E-mail: gharlipourz@yahoo.com

## Highlights

- Sexual behaviors by adolescents and youth are considered as the primary health priorities in societies.
- The objective of this study was to identify environmental factors influencing premarital sexual intercourse from the Iranian youths' perspective.
- Culture, socioeconomic status, family, media, friends, and peers were identified as the main categories influencing student's perspectives on premarital sexual intercourse.

## Plain Language Summary

Sexual behaviors by adolescents and youth are the primary health priorities in each society because of the ever-increasing prevalence of human immunodeficiency virus infection, sexually transmitted infections, and unwanted pregnancies. Because of the unknown dimensions of the subject and to obtain comprehensive experiences about these human behaviors, qualitative studies are needed. This study aimed at explaining the factors influencing premarital sexual activity among students of the Payame Noor University of Shiraz. All interviews were conducted by the researcher in a comfortable atmosphere (meeting room) and carried out without the presence of others. Interviewers were informed about the topic, collecting qualitative data, and homogeneity in gender. According to the obtained results, culture, socioeconomic status, family, media, and friends and peers were the main categories and environmental factors influencing premarital sexual intercourse from the Iranian youths' perspective.

### Introduction

**A**lthough several psychological studies have carried out worldwide for understanding sexual behavior and controlling risky sexual behaviors and the related consequences, these issues have not well understood [1]. In recent years, sexual behaviors by adolescents and youth have become the primary health priorities in all societies because of the ever-increasing prevalence of Human Immunodeficiency Virus (HIV) infection/Acquired Immunodeficiency Syndrome (AIDS), Sexually Transmitted Infections (STIs), and unwanted pregnancies [2]. According to the United Nations Development Program (UNDP), HIV infection has been associated with several problems in human development [3].

In Iran, the highest frequency of HIV transmission has shifted from injecting by drug users to risky sexual behaviors [4] so that, despite religious and societal disapproval, some Iranian adolescents initiate sex before marrying, and so are at risk of contracting HIV and sexually transmitted diseases [5]. Although Iranian youth are generally believed to be sexually virgin or innocent until marriage, a recent study has reported that the prevalence of premarital relationships is rising among Iranian young people [1]. In a study in Mashhad City, in the northeast of Iran, 35.3% of the single and sexually experienced students reported having sex in the last three

months [6]. Despite the earlier maturation of girls and boys across the world in recent decades, the mean age at marriage is increasing, leading to premarital sexual activities ever than before. During the past several decades, a significant number of teens worldwide have experienced sexual activities before marriage [7].

In this regard, boys and girls within the age range of 15-24 years have been reported to be at risk for HIV infections, and one-third of new cases of STIs have seen in the age group of lower than 25 years [8]. In many countries, premarital sexual abstinence and delaying sexual activity are strategies to reduce the risk of HIV/AIDS among young people [9]. The youth are a high-risk group because of their unprotected sexual experiences, sex with different partners, and traveling to places with higher risks of transmission of the disease [10]. Some studies have mentioned various factors influencing premarital sexual behavior, such as having higher socio-economic status, growing in two-parent families, parents' educational level, parents' expectations, family characteristics, peer pressure, and exposure to mass media, such as satellite programs and the Western culture [1, 11, 12].

Nonetheless, the underlying factors influencing premarital sexual behavior and sexual abstinence have not been completely investigated [13, 14]. In developing countries, such as Iran, the traditional norms have

changed to modernism facilitated by mass media, satellite, and the Internet, as well as renewed modern thinking (such as personal freedom). These changes promoted the possibility of involvement in sexual activities higher than in other communities [15]. Because of the unknown dimensions of the subject, we need to conduct qualitative studies to obtain comprehensive experiences about these human behaviors [16, 17].

The aim of this study was to identify factors influencing premarital sexual intercourse from Iranian youths' perspectives in Shiraz City, Iran.

## Materials and Methods

Using qualitative content analysis, this study aimed at explaining the factors influencing premarital sexual behavior among students of the Payame Noor University of Shiraz, Iran, from February to September 2014. Both male and female students were selected from the university campus based on purposive sampling method. The inclusion criteria were being single, voluntarily participating in the study, and being at risk of some forms of sexual behavior. Semi-structured interviews were used to collect data. Informed consent was obtained from all participants before the interviews. They were assured of the confidentiality of their information, which was obtained without recording their names. Interviewers were informed about the considered confidential topics and established a warm and empathetic relationship with the participants to encourage them to converse openly. They were careful to keep their responses confidential and showed respect towards participants' responses. Participants were not coerced to reveal their sexual behaviors.

The following key questions were used to guide the interviews:

In your opinion, what are the reasons to have premarital sexual behaviors against Sharia in some students of your age? (Sharia is the Islamic legal system derived from the religious precepts of Islam, particularly the Quran and the Hadith).

What are the reasons to prevent premarital sexual intercourse in some students of your age?

I would like to ask you whether you've had sexual behaviors against Sharia (you are free not to respond). Regardless of your current conditions, how much do you think you can still protect yourself against premarital

sexual intercourse? What are the important and decisive factors in this regard?

What is your opinion about sexual activities between boys and girls at your age?

What is the role of religious beliefs about premarital sexual intercourse?

In your opinion, what is Islam's view toward sex outside of Sharia?

All interviews were implemented by the researcher in a comfortable setting (meeting room) and conducted without the presence of others. Interviewers were well informed about the topic, collecting qualitative data, and homogeneity in gender. Each interview lasted 20-30 min and continued until data saturation. Thirty fresh man year students in social sciences, psychology, art, and mathematics were studied, of whom seven students refused to participate due to the confidential nature of the issue. After the participants' permission, all interviews were recorded using a voice recorder.

The obtained data were analyzed using thematic analysis. The data analysis began during the first field activities, and as the study proceeded, revisions were made in research questions, leading to the refinement of the analysis. The researcher initiated reading and coding while the data were being collected. They wrote "memos" to help to clarify how concepts were fully integrated with others and how the analysis resulted in the research report. The Bryman and Burgess "frame work approach" was used for data analysis, including five steps of "familiarization", "identifying a thematic frame work", "indexing", "charting", and "mapping and interpretation" [18]. The thematic framework was updated in the analysis process, considering that certain labels began to merge, and others separated.

Lincoln and Guba's criteria were used to evaluate the rigor of the qualitative data, which included credibility, transfer ability, dependability, and conformability. Credibility refers to the level of confidence that can be placed in the truth of the research findings and can be established by some strategies in qualitative research, such as member checking, prolonged engagement, and peer debriefing. As an essential step in preventing against researcher bias, member checking provided the opportunity for participants to either agree or disagree with the conclusions drawn from the interviews [19].

In this study, eight randomly selected participants were given a full transcript of their coded interviews with a summary of the obtained themes to determine their reviews, verifications, and comments. The participants received feedback, and all agreed with the concepts and themes developed by the research team.

For establishing trustworthiness to provide an external check of bias development, peer debriefing was overtly examined through personal reflection, consultation with three experts in qualitative studies. In data collection and analysis, the research team prolonged engagement over a 3-month period and 25-hours interviews together and participated in meetings to discuss the obtained codes and themes and any necessary revisions. Differences in coding were resolved via discussions by three independent reviewers. Both dependability and conformability were implemented using an audit trail. To ensure data accuracy and consistent interpretations during data analysis, the research team kept decision trails to document the decisions made through the study. Besides, the results were checked by some participants who met the inclusion criteria but did not participate in the research for confirming the fitness of the results. The obtained data were analyzed in MAXQDA v. 10 software.

## Results

The participants' age range was 19-25 years. Of 30 students, 17 cases were male, and 13 cases were female. Analysis of handwritten notes about environment and factors influencing premarital sexual intercourse from the students' perspective resulted in the identification

of 5 main categories: Culture, Socio-economic status, Family, Media, and Friends and Peers that are described below (Table 1).

### Culture

In this study, culture consisted of two sub-categories of acculturation and cultural norms.

#### Acculturation

Some students stated that the influence of western culture could make them thinking of sexual thoughts. They reported watching various satellite programs, such as movies, as the main reason. For example, one student said: "...I think one of the reasons girls or boys are getting attracted to sex is Westernization ... the things they get from the satellite network or the Internet." (Male, 23 years old)

#### Cultural norms

Several students admitted that some western norms are not acceptable in our society. They also stated that some western patterns of behaviors are consistent with the values and beliefs in Iran. For example, a student said: "...Well culturally, not having premarital sex is a value and a norm in our society; we need to respect it". (Female, 22 years old).

### Socioeconomic status

The second main category was socio-economic status, which included the sub-categories of economic prob-

**Table 1.** Frequency of the categories and subcategories

Category	Sub-category	NO. (%)
Culture	Acculturation	15(50)
	Cultural norms	10(33.33)
Socioeconomic status	Economic problems	11(36.66)
	Heavy dowry	6(20)
	Availability of unhealthy options	8(26.66)
	Family support	7(23.33)
Family	Values and norms of the family	14(46.66)
	Control and supervision	12(40)
	Parent-child relationship	15(50)
Media	Satellite	18(60)
	Internet	13(43.33)
Friends & Peers	Friends and peer pressure	20(66.66)
	Lack of resistance against friends and peer influence	15(50)

lems, heavy dowry, and the availability of unhealthy options.

### **Economic problems**

Students repeatedly mentioned economic issues as an obstacle against marriage. Some students believed that unemployment and adequate income were the reasons to avoid marriage leading to premarital sex. In this regard, one participant said: "...One of the reasons that have increased marriage age is economic conditions and problems. When young men cannot marry, they go for illegitimate premarital sex". (Male, 22 years old)

### **Heavy dowry**

Heavy dowry was another factor affecting premarital sex, as reported by the participants. For example, one student stated: "...Because of heavy dowries, young people do not like to get married ... and as they are not married, they have to find an alternative for it". (Male, 21 years old).

### **Availability of unhealthy options**

Some students reported the campus environment as a place to start a relationship with the opposite sex resulting in premarital sex. For example, one student said: "... Some do not have an affair in high school, but after they enter university and have contact with various people of their age, they feel the tendency to experience. I don't know; they are either cheated or are naive". (Female, 20 years old).

## **Family**

The third extracted category was family and included sub-categories of family support, family values, norms, control, and supervision, as well as the parent-child relationship, as mentioned frequently by the students.

### **Family Support**

In this phase of the study, financial and emotional support by the family was reported by a large number of students as one of the factors affecting premarital abstinence. On the other hand, some students believed that the lack of affection and love from family could increase premarital sex. For example, one student said: "...Well, some have grown up in a close and warm family. They do not feel a lack of affection and compassion. They are less attracted to a relationship with the opposite sex". (Female, 22 years old)

### **Values and norms of family**

Several students reported that principles, values, beliefs, and norms governing the family affect children's premarital sex or abstinence. For example, one of the students said: "...Family, I mean the family environment, values and culture affect the issue. If values, culture, and religious issues govern the family, the individual growing up there accepts them as laws and come to the conclusion that he/she should not do it (premarital sex)". (Male, 21 years old)

### **Control and supervision**

The students who participated in the study reported harmful too much freedom or restraint imposed by the family. For example, a student said: "...In my opinion, families that are too strict, or give their children too much freedom, both will harm children causing their children to go this way (premarital sex)". (Female 19 years old)

### **Parent-child relationship**

Good relationships between parents and children in the family can have a positive impact on the children mentally and emotionally. On the other hand, the lack of a proper parent-child relationship can have a devastating effect on them. A large number of students acknowledged this effect. For example, one of the students said: "...When I come back from college or workplace, my parents do not speak to me ... They don't have a close relationship with me. I have to compensate for this lack of affection outside the family. I have to seek affairs with the opposite sex". (Male, 22 years old)

### **Media**

Media, such as satellite, Internet programs, and websites, as the fourth category, was reported as one of the environmental factors influencing premarital sex by students.

### **Satellite**

Some students stated that some films and commercials broadcasted via satellite are inconsistent with the principles, values, beliefs, and culture of their country. Some of these films are made to weaken families in Muslim countries, such as Iran. They can affect the youth and lead to increased promiscuity and premarital sex. For example, one student said: "...The satellite channels promote Western culture, which is mostly inconsistent with our values and culture. Satellite films can

cause widespread promiscuity, which can lead young people toward sex". (Female, 20 years old)

### The Internet

Inappropriate use of the Internet was another factor reported by the students as a way of communication and finding partners resulting in emotional and sexual relationships. For example, one of the students said: "... Sometimes the Internet is a problem because some do not use the Internet properly. They watch inappropriate movies or visit websites with inappropriate content. They may find partners there and have affairs with them too..." (Male, 23 years old)

### Friends and Peers

The fifth main category was friends and peers. The majority of the participants reported it as a stimulating factor to have sex. Friends and peer pressure and lack of resistance against them were the extracted sub-categories.

#### Friends and Peer Pressure

Friends and peer pressure and their insistence in risky conditions can make adolescents and the youth thinking of having sex.

For example, one student said: "...Well, friends and peers influence us. The effect depends on what kind of friends you choose. Sometimes, some peers talk about their sexual experiences in the past or insist that you attend a party where there are people of the opposite sex. This can create opportunities for an affair". (Male, 24 years old)

#### Lack of resistance against friends and peer pressure

Some students noted a lack of resistance against friends and peer pressure and an inability to "say no" in high-risk situations.

One student said: "...When you are with friends or peers, and they insist you experience sex, it is up to you. You can resist this situation in front of them and do not accept the offer. I think a lot of the youth in such situations accept the offer against their will to show they are on a par with their peers". (Female, 22 years old)

### Discussion

In this study, culture, socio-economic status, family, media, and friends and peers were identified as the

main categories and environmental factors influencing premarital sexual intercourse from the Iranian youths' perspective. In the Islamic doctrine, "revealing sexual desire and lifting of traditional moral restraints" is not accepted [20]. Moreover, in the Iranian culture, people hold onto the traditional culture of sexuality based on "purity", "chastity", "honor", and "honesty" underlying the family structure [20]. On the other hand, in Iran, the teachings of Islamic principles tie strongly to interpretations, which form the basis of Iranians' understandings of sexuality. The expression of sexuality is considered legitimate only within the framework of Islamic marriage [21].

In the current study, acculturation and cultural norms were identified as sub-categories of culture. Programs to promote healthy behaviors, the effects of environmental, cultural, political, and economic factors should be more considered [22]. Religious beliefs have shown as the important inhibiting factors for premarital sexual experiences [23, 24], whereas the role of culture and acculturation on sexual behavior has also been revealed [25, 26]. By strengthening principles, values, and cultural norms of society, healthy characters, attitudes, and behaviors can be generated among adolescents and young people. On the other hand, emphasizing the rich Iranian-Islamic culture and the good tradition of marriage can help reduce premarital sex outside the framework of Islam. It seems that the policy makers and the health educators should integrate cultural norms and religious beliefs in their educational programs as one of the main components of the health-related programs, especially risky sexual behavior.

In this study, socio-economic status was identified as the second main category. Li reported a low level of family income as the most essential factor associated with sexual behavior [27]. Noroozi et al. reported that when the economic needs of girls are neglected (for whatever reason), it makes them start a relationship with the opposite sex [15]. The results of Zadeh Mohammadi and Ahmad Abadi study also showed that the economic status of a family is one of the defining factors in risky sexual behavior. In this regard, Teenagers from low-income families are more likely to experience sexual risk-taking behaviors than others [28]. Therefore, socio-economic status plays an essential role in healthy or risky behaviors by people.

In the current study, the family was identified as the third category, which includes the sub-categories of family support, family values and norms, family control and supervision, and the parent-child relationship.

Family is the first social institution satisfying the physical and psychological needs of the individuals. It has an important role in the ordinary and abnormal growth of its members [29], as an organized system affecting children. The daily routines of families and their relations are there sources that affect the growth of children. A healthy family creates a healthy structure and provides the opportunity for growth and development of children.

In contrast, any problem in the family functions causes problems in the members' behavior [30]. Noroozi showed that five main concepts are involved in the formation of sexual relations before marriage, such as parents' child-rearing practices, parents' interactions, children's economic support, religious beliefs, and sexual awareness [15]. Further more, another study showed that one of the three main domains identified, namely family management of child sexuality, comprised the following sub-domains: 1. understanding of child sexuality; 2. family rules; 3. parent-child interactions; and 4. opposite-sex interactions [31].

The importance of parental supervision has shown as one of the causative factors of HIV infection and high-risk sexual behavior [32, 33]. Young women whose parents were divorced or lived separately were more likely to report premarital sexual intercourse than other women. Similar results have been reported in other studies on teens, in which the importance of the presence of both parents in the family and associated parental control and monitoring in postponing premarital sexual activities have announced. Living with both parents is a protective factor for premarital sexual behavior among young people.

The absence of a father has shown in another study to have the most adverse influence in the early initiation of premarital sex, particularly in females [34]. In Iran, several studies have been conducted on family and its role in the appearance of behavioral and risk-taking problems in adolescents [35, 36]. However, it seems that no comprehensive study has ever been done on the role of the family in premarital sex. Noroozi showed that the lack of emotional support (especially from fathers) could decrease girls' protection (especially at younger ages) from sexual requests received from boys. It should be mentioned that freedom without boundaries and lack of proper control make youth interested in having opposite-sex friendships and sexual relationships [15]. This finding suggests that a better family atmosphere and parent-child communication may lead to more consistent parent-child values and greater respect for

parents' attitudes, resulting in a decrease in premarital sexual behavior. Therefore, the family has an important role in shaping sexual relations before marriage.

In this study, the category of media was found as another factor influencing premarital sexual behavior. The impact of media on sexual activity has been widely emphasized. In this regard, Wusu stated that informative sexual health content on media could promote sexual health among adolescents; however, sexual content with no limitation can put their sexual health at risk [37]. Onipede in a study to assess the effects of mass media on sexual health behavior among single students reported that being frequently exposed to print media, home video, and Internet are significantly related to the rising level of sexual activities among female respondents [38]. The media content, such as the Internet and satellite programs, are mostly produced in the Western and non-Islamic societies; therefore, they are not compatible with the rich culture of Islamic societies. Thus, the media can hurt the sexual behaviors of adolescents and young people.

In this study, friends and peers were identified as another factor influencing sexual intercourse. The findings of a study in Nepal showed that in the developed countries, young people are affected by the attitudes and sexual behaviors of their peers [39]. Another study conducted in El Salvador reported the studied adolescents encouraged to have sex by their friends had more sex than others. On the contrary, those without sex experiences had received messages from friends to continue sexual abstinence [40]. Human learning mostly occurs through observation and imitation of others' behaviors. Undoubtedly, exposure to unhealthy patterns of behavior may lead to imitation and the tendency for that behavior.

This study had some limitations. First, the researchers were unable to identify the number of students who had premarital sex. Second, under-reporting of sensitive behaviors in face to face interviews is more likely than using self-administered questionnaires. Third, the sampling strategy can be biased because people who speak more comfortably about sexual issues are more likely to be included in the study. Maintaining strict privacy and observing the rights of the participants were the strengths of the current study. Single students were successfully studied in in-depth qualitative research and confidential information associated with sexual issues was collected. Finally, the results of this study have both theoretical and empirical implications for future research.

Given the prominent role of culture and cultural factors in premarital sexual behavior, more emphasis should be put on principles, values, and cultural norms in health plans about adolescents and young people. Furthermore, greater emphasis on support and supervision by families in family-centered educational programs can increase correct orientation and healthy behaviors among adolescents. Also, health interventions and programs should focus on the negative role of some media as well as the influence of friends and peers. They should strengthen the ability to resist peer pressure for premarital sexual behavior. The ability to “say no” should be increased among adolescents. Besides, there is no comprehensive sex education for youth in Iran. However, in the Iranian contexts, sexual health education and services pose a variety of challenges and obstacles for unmarried youth that make them having premarital sexual intercourse.

## Ethical Considerations

### Compliance with ethical guidelines

The Ethics Committee of Shahid Beheshti University of Medical Sciences approved the study (No. 160 on November 4, 2013).

### Funding

This article was extracted from a PhD thesis of the third author on Health Education and Health Promotion in Department of Public Health, Faculty of Health, Shahid Beheshti University of Medical Sciences, Iran.

### Authors contributions

Conceptualization and funding acquisition: Mohtasham Ghaffari, Zabihollah Gharlipour; Data collection: Tahereh Ramezani, Fatemeh Izadkhah, Sakineh Rakhshanderou; Preparing the draft: Zabihollah Gharlipour, Farideh Khalaj abadi Farahani, Mohtasham Ghaffari, Tahereh Ramezani; Data analysis: Sakineh Rakhshanderou and Zabihollah Gharlipour; Reviewing and editing the manuscript: All authors.

### Conflict of interest

The authors declared no conflict of interest.

### Acknowledgements

The authors thank the managers of the Payame Noor University of Shiraz, Iran, and students who participated in the present study.

## References

- [1] Farahani FK, Cleland J, Mehryar AH. Associations between family factors and premarital heterosexual relationships among female college students in Tehran. *International Perspectives on Sexual and Reproductive Health*. 2011; 37(1):30-9. [DOI:10.1363/3703011] [PMID]
- [2] Negeri EL. Assessment of risky sexual behaviors and risk perception among youths in Western Ethiopia: The influences of family and peers: A comparative crosssectional study. *BMC Public Health*. 2014; 14:301 [DOI:10.1186/1471-2458-14-301] [PMID] [PMCID]
- [3] UNAIDS. United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO). AIDS epidemic update. WHO Library Cataloguing-in-Publication Data [Internet]. 2009 [Updated 2009 November] Available from: [http://data.unaids.org/pub/report/2009/jc1700\\_epi\\_update\\_2009\\_en.pdf](http://data.unaids.org/pub/report/2009/jc1700_epi_update_2009_en.pdf) 2009. <https://ci.nii.ac.jp/naid/10012624671>.
- [4] Shirazi KK, Morowati Sharif Abad MA. Religiosity and determinants of safe sex in Iranian non-medical male students. *Journal of Religion and Health*. 2009; 48(1):29-36. [DOI:10.1007/s10943-008-9184-z]
- [5] Mosavi SA, Babazadeh R, Najmabadi KM, Shariati M. Assessing Iranian adolescent girls' needs for sexual and reproductive health information. *Journal of Adolescent Health*. 2014; 55(1):107-13. [DOI:10.1016/j.jadohealth.2013.11.029] [PMID]
- [6] Hedayati-Moghaddam MR, Eftekhazadeh-Mashhadi I, Fathimoghaddam F, Pourafzali SJ. Sexual and reproductive behaviors among undergraduate university students in Mashhad, Iran. *Journal of Reproduction & Infertility*. 2015; 16(1):43-8. [PMID] [PMCID]
- [7] Oats JN, Abraham S. *Fundamentals of obstetrics and gynecology*. 9<sup>th</sup> edition. Edinburgh: Mosby; 2010.
- [8] United Nation Population Fund (UNFPA). *Adolescent sexual & reproductive health: Toolkit for humanitarian settings*. New York: UNFPA; 2009.
- [9] Oladepo O, Fayemi MM. Perceptions about sexual abstinence and knowledge of HIV/AIDS prevention among in-school adolescents in a western Nigerian city. *BMC public health*. 2011; 11(1):304. [DOI:10.1186/1471-2458-11-304] [PMID] [PMCID]
- [10] Najarkolaei FR, Niknami S, Aminshokravi F, Tavafian SS, Joneidi Jafari NA, Golabchi A. Promoting sexual abstinence intention among female university students: A quasi-experimental study. *Journal of Research In Medical Sciences: The Official Journal Of Isfahan University Of Medical Sciences*. 2013; 18(1):37-43. [PMID] [PMCID]
- [11] Habesha T, Aderaw Z, Lakew S. Assessment of exposure to sexually explicit materials and factors associated with exposure among preparatory school youths in Hawassa City, Southern Ethiopia: A cross-sectional institution based survey. *Reproductive Health*. 2015; 12:86. [DOI:10.1186/s12978-015-0068-x] [PMID] [PMCID]
- [12] The Heritage Foundation. *The relationship between family structure and adolescent sexual activity*. Washington DC: The Heritage Foundation; 2008.
- [13] Vakilian K, Mousavi SA, Keramat A. Estimation of sexual behavior in the 18-to-24-years-old Iranian youth based on a crosswise model study. *BMC Research Notes*. 2014; 7:28. [DOI:10.1186/1756-0500-7-28] [PMID] [PMCID]
- [14] Koffi AK, Kawahara K. Sexual abstinence behavior among never-married youths in a generalized HIV epidemic country: Evidence from the 2005 Cote d'Ivoire AIDS indicator survey. *BMC Public Health*. 2011; 11:111. [DOI:10.1186/1471-2458-11-111] [PMID] [PMCID]



- Health. 2008; 8:408. [DOI:10.1186/1471-2458-8-408] [PMID] [PMCID]
- [15] Noroozi M, Taleghani F, Merghati-Khoei ES, Tavakoli M, Gholami A. Premarital sexual relationships: Explanation of the actions and functions of family. *Iranian Journal of Nursing and Midwifery Research*. 2014; 19(4):424-31. [PMID] [PMCID]
- [16] Wong LP. Qualitative inquiry into premarital sexual behaviours and contraceptive use among multiethnic young women: Implications for education and future research. *PLOS ONE*. 2012; 7(12):e51745. [DOI:10.1371/journal.pone.0051745] [PMID] [PMCID]
- [17] Polit DF, Beck CT. *Essentials of nursing research: Methods, appraisal, and utilization*. 6<sup>th</sup> edition. Philadelphia: Lippincott; 2006.
- [18] Bryman A, Burgess Re. *Analyzing qualitative data*. London: Taylor & Francis e-Library; 2002. [DOI:10.4324/9780203413081]
- [19] Lincoln Y, Guba E. Paradigmatic controversies, contradictions, and emerging confluences. In: Denzin NK, Lincoln YS, editors. *Handbook of Qualitative Research*. California: Sage Publication; 2000.
- [20] Ghorashi Z, Merghati-Khoei E, Yousefy A. Measuring Iranian women's sexual behaviors: Expert opinion. *Journal of Education and Health Promotion*. 2014; 3:80. [DOI:10.4103/2277-9531.139245] [PMID] [PMCID]
- [21] Merghaty Khoei E, Richters J. Concepts of sexuality and health among Iranian women in Australia. *Australian Family Physician*. 2008; 37(3):190-2. [PMID]
- [22] Wong ML. Behavioural interventions in the control of human immunodeficiency virus and other sexually transmitted diseases: A review. *Annals of the Academy of Medicine, Singapore*. 1995; 24(4):602-7. [PMID]
- [23] Rahmani A, Merghati-Khoei E, Moghadam-Banaem L, Hajizadeh E, Hamdieh M, Montazeri A. Development and psychometric evaluation of the Premarital Sexual Behavior Assessment Scale for Young Women (PSAS-YW): An exploratory mixed method study. *Reproductive Health*. 2014; 11:43. [DOI:10.1186/1742-4755-11-43] [PMID] [PMCID]
- [24] Merghati Khoei E, Whelan A, Cohen J. Sharing beliefs: What sexuality means to Muslim Iranian women living in Australia. *Culture, Health & Sexuality*. 2008; 10(3):237-48. [DOI:10.1080/13691050701740039] [PMID]
- [25] Schwartz SJ, Unger JB, Des Rosiers SE, Lorenzo-Blanco EI, Zumbo BL, Huang S, et al. Domains of acculturation and their effects on substance use and sexual behavior in recent Hispanic immigrant adolescents. *Prevention Science: The Official Journal of the Society for Prevention Research*. 2014; 15(3):385-96. [DOI:10.1007/s11211-013-0419-1] [PMID] [PMCID]
- [26] Rashidian M, Hussain R, Minichiello V. 'My culture haunts me no matter where I go': Iranian-American women discussing sexual and acculturation experiences. *Culture, Health & Sexuality*. 2013; 15(7):866-77. [DOI:10.1080/13691058.2013.789128] [PMID]
- [27] Li S, Huang H, Cai Y, Xu G, Huang F, Shen X. Characteristics and determinants of sexual behavior among adolescents of migrant workers in Shanghai (China). *BMC Public Health*. 2009; 9:195. [DOI:10.1186/1471-2458-9-195] [PMID] [PMCID]
- [28] Zadeh Mohammadi A, Ahmad Abadi Z. The co-occurrence of risky behaviors among high school adolescents in Tehran. *J Fam Res*. 2008; 4:87-100.
- [29] Shahhosseini Z, Simbar M, Ramezankhani A, Majd HA. Supportive family relationships and adolescent health in the socio-cultural context of Iran: A qualitative study. *Mental health in family medicine*. 2012; 9(4):251-6. [PMID] [PMCID]
- [30] Fiese BH, Winter JR. Family influences. *Encyclopedia of Infant and Early Childhood Development*. 2008; 1:492501. [DOI:10.1016/B978-012370877-9.00061-X]
- [31] Merghati-Khoei E, Abolghasemi N, Smith TG. "Children are sexually innocent": Iranian parents' understanding of children's sexuality. *Archives of Sexual Behavior*. 2014; 43(3):587-95. [DOI:10.1007/s10508-013-0218-6] [PMID]
- [32] Marvel F, Rowe CL, Colon-Perez L, DiClemente RJ, Liddle HA. Multidimensional family therapy HIV/STD risk-reduction intervention: An integrative family-based model for drug-involved juvenile offenders. *Family Process*. 2009; 48(1):69-84. [DOI:10.1111/j.1545-5300.2009.01268.x] [PMID]
- [33] Thoma BC. Parental monitoring among young men who have sex with men: Associations with sexual activity and HIV-related sexual risk behaviors. *J Adolesc Health*. 2017; 61(3):348-54. [DOI:10.1016/j.jadohealth.2017.03.004]
- [34] Farahani FK, Cleland J, Mehryar AH. Correlates and determinants of reproductive behavior among female university students in Tehran. *Journal of Reproduction & Infertility*. 2012; 13(1):39. [PMID] [PMCID]
- [35] Alimoradi Z, Kariman N, Simbar M, Ahmadi F. Contributing factors to high-risk sexual behaviors among Iranian adolescent girls: A systematic review. *Int J Community Based Nurs Midwifery*. 2017; 5(1):2-12.
- [36] Zargar Y, Mohammadi Bahramabadi R, Bassak Negad S. A study of family processes as predictors of behavior problems among second grade high school students in Yasuoj. *Journal of School Psychology*. 2012; 1(2):77103.
- [37] Wusu O. Exposure to media content and sexual health behaviour among adolescents in Lagos metropolis, Nigeria. *African Journal of Reproductive Health*. 2013; 17(2):157-68.
- [38] Onipede W. Mass media and sexual health behaviour of college students in Nigeria: A study of Lagos State University. *East African Journal of Public Health*. 2009; 6(3):303-8. [PMID]
- [39] Adhikari R, Tamang J. Premarital sexual behavior among male college students of Kathmandu, Nepal. *BMC Public Health*. 2009; 9:241 [DOI:10.1186/1471-2458-9-241] [PMID] [PMCID]
- [40] Ruiz-Canela M, Lopez-Del Burgo C, Carlos S, Calatrava M, Osorio A, Irala J. Family, friends, and other sources of information associated with the initiation of sexual relations by adolescents in El Salvador. *Revista Panamericana de Salud Publica: Pan American Journal of Public Health*. 2012; 31(1):54-61. [DOI:10.1590/S1020-49892012000100008] [PMID]