### Access this article online

Quick Response Code:



Website: www.jehp.net

DOI:

10.4103/jehp.jehp 462 19

Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran, <sup>1</sup>Nursing and Midwifery Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran, <sup>2</sup>Department of Curriculum Studies and Instruction, Faculty of Education and Psychology, Ferdowsi University of Mashhad, Mashhad, Iran,3Department of Educational and Counseling Psychology. Faculty of Education and Psychology, Ferdowsi University of Mashhad, Mashhad, Iran

### Address for correspondence:

Dr. Khadigeh
Mirzaiinajmabadi
Associated Prof in
Reproductive Health,
Nursing and Midwifery
Care Research Center,
Mashhad University
of Medical Sciences,
Mashhad, Iran.
E-mail: mirzaiikh@
mums.ac.ir

Received: 11-08-2019 Accepted: 24-10-2019 Published: 28-02-2020

# Sexual health education issues (challenges) for adolescent boys in Iran: A qualitative study

Fariba Askari, Khadigeh Mirzaiinajmabadi<sup>1</sup>, Mahmood Saeedy Rezvani<sup>2</sup>, Seyyed Mohsen Asgharinekah<sup>3</sup>

#### **Abstract:**

**BACKGROUND:** Sexual health education, especially in adolescents, faces excess challenges in many cultures. Iranian adolescents, especially boys, have many educational needs in the field of sexual health that have not been met due to various obstacles. The main purpose of this qualitative study was to explore the challenges of sexual health education for Iranian adolescent boys.

**MATERIALS AND METHODS:** This qualitative content analysis study was conducted through individual semi-structured in-depth interviews from 45 participants (20 adolescents and 25 key adults). Data were analyzed using inductive conventional content analysis based on the Graneheim and Lundman's approach via MAXQDA software (version 2010) by VERBI GmbH Company, Berlin, Germany.

**RESULTS:** In total, 2 categories and 11 subcategories emerged; including, "extrapersonal barriers to sexual health education for adolescent boys" containing seven subcategories of lack of clear policies, family inadequacy, social barriers, cultural heterogeneity, school inadequacy, cyber threats, and educational process inadequacy concerning adolescent sexual health education as well as "intrapersonal barriers to sexual health education for adolescent boys" comprised four subcategories of uncontrolled emotions of adolescence, adolescent rebellion, information and communication weaknesses, and adolescents' concerns about being judged by others.

**CONCLUSION:** The findings clarify some barriers to sexual health education for adolescent boys. Therefore, it was recommended to develop community-based educational programs to change attitudes of families and society toward addressing the challenges of providing sexual health education to adolescent boys. Moreover, it was suggested to utilize an educational program specific to adolescent boys, tailored to the Iranian culture, using the potential of religion.

#### Keywords:

Adolescent, boys, challenges, qualitative study, sexual health education

### Introduction

At present, there are approximately 1.2 billion adolescents living around the world that are considered as valuable resources for socioeconomic progress of countries. Adolescence refers to a stage of life characterized by a number of physical and hormonal changes that can lead to sexual maturation and fertility. These changes also make them vulnerable to risks. Today,

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

sexual and reproductive health issues such as unwanted pregnancies and infections with acquired immunodeficiency syndrome (AIDS) and hepatitis are among the most important causes of adolescent mortality across the world. Most of these deaths can be prevented, and therefore, justify extensive measures adopted to promote adolescent health in the world and including Iran. [4-6] It should be noted that adolescence is a chance when individuals can be assisted in the path to achieving their

How to cite this article: Askari F, Mirzaiinajmabadi K, Saeedy Rezvani M, Asgharinekah SM. Sexual health education issues (challenges) for adolescent boys in Iran: A qualitative study. J Edu Health Promot 2020;9:33.

abilities.[3,7] and making informed decisions regarding sexual and reproductive health as well as being protected from related diseases.<sup>[8,9]</sup> However, discussing sexual and reproductive issues can be a challenge for families, schools, and communities. [10] Negative attitudes toward sexual health education, ineffective communication skills, inadequate teaching materials, as well as insufficient awareness of parents and teachers in many developing countries have prevented adolescents' access to basic knowledge in this domain.[11-13] As a result, adolescents experience sex, followed by sexually transmitted diseases or unwanted pregnancies.[14] Evidence has also suggested that boys have been less respected in terms of sexual education. In fact, adolescent boys and young men constituting half of the problem and half of the solution have been often ignored. [15,16] In Iran (2018), it is estimated that the number of new HIV infections (men, 15+) 3200 (810-8600), is three times higher than (women, 15+) 1000 (<500-3000), and the AIDS-related deaths (men, 15+) 2100 (1100-3900) are four times higher than (women, 15+) <500 (<500–990).[6] The current emphasis is also placed on boys' needs to gain more information and receive health education in a formal manner.[15]

Currently, there are a series of barriers to beneficent sexual and reproductive health for teenagers. At the political level, there are often restrictive laws and policies. Various social, cultural, and religious factors create a deterrent to discuss adolescent sexual health. Poor reproductive health of adolescents can be caused by conflicts about teaching these issues to adolescents.[14] Accordingly, sexual health education should be recognized as a political, sociocultural, and educational process. However, this issue has still remained as a taboo within the cultural context of Iran.[2] Since our information about sexual health education to Iranian boys was very insufficient and what is available in international documents does not convenient our social and cultural contexts, so it seemed necessary to obtain key information and experiences in this area. Recognition of sexual health education challenges in cultural context of Iran should be based on a clear understanding of key people's experiences in this field. Moreover, this was achieved through a deep understanding and clarification of this phenomenon through a qualitative study. Therefore, the present study was conducted to explore challenges of sexual health education for Iranian adolescent boys.

### **Materials and Methods**

This study was performed using a qualitative approach and an inductive conventional content analysis method between June 2018 and July 2019. The participants included a total number of 20 adolescent boys aged 12–16 years and 25 key adults aged 30–58 years including fathers, mothers, teachers, school administrators, clerics, sociologists, psychologists, counselors, policy-makers, experts, as well as sexual and reproductive health professionals, and nongovernmental organization representatives. They were selected using a purposive sampling method with maximum variation of level of education, occupation, and social-economic-cultural status. The data collection was conducted through semi-structured in-depth interviews performed individually from key adults in the cities of Mashhad and Tehran, Iran. The adolescent boys aged 12-16 years; they were Iranian, as Persian language speakers, and evolutionarily and intellectually healthy with Iranian parents, speaking Persian, married, having adolescents aged 12-16 years old; whose children were evolutionally and intellectually healthy as well as other key Iranian people, speaking Persian, having work experience with adolescents aged 12–16 years who were willing to participate in the study. It should be noted that if the participants did not wish to continue cooperation, they could withdraw at each stage of the study. The interviews with adolescent boys started at public gathering places such as parks, gyms, mosques, public libraries, and summertime classes by a male investigator (Asghari Nekah SM). Other interviews with key adults were also conducted by Askari F. at educational centers, high schools, health-care centers, and other participants' workplaces. After justifying the participants about the research objectives, written informed consent was obtained. Since the adolescent boys were not at the legal age, written informed consent was obtained from their parents. Interviews began with several open-ended questions based on an interview guide, followed by exploratory questions to reach more clarity. Adolescent boys, parents, and other key people were interviewed with different questions. All the interviews were recorded on two digital recorders. Each interview also lasted 45–90 min. An example of the interview questions of parents was as follows:

"Can you tell me about your experience regarding sexual health education to your adolescent son? What topics have you ever talked about? How do you explain the concept of sexual health education? (What are the topics, timing, and method of teaching?) What experiences and difficulties did you encounter in providing sexual health education to your adolescent son?

Following each interview, it was transcribed verbatim and was read out repeatedly.

Data analysis was also performed using repeated reading and constant comparisons based on the approach developed by Graneheim and Lundman (2004) via MAXQDA software (version 2010) by VERBI GmbH Company, Berlin, Germany.

Accordingly, words, sentences, and paragraphs that could have meanings in relation to the research purpose were considered and coded or tagged with a word indicating their semantic units. At this stage, there were attempts to identify maximum possible codes proportional to the data. Subsequently, initial subcategories were formed and the primary categories were compared. The initial categories that were conceptually similar were merged into larger ones. This analysis is repeatedly moved back and forth over and over again in collaborative meetings and authors' discussions to reach data saturation. Then, themes were obtained from the initial categories with similar meanings and content [Table 1]. After reading out the codes repeatedly and eliminating repetitive ones, the same codes were merged along with data classification and then the main subcategories and categories were obtained.

In this study, eventually, 11 subcategories and 2 main categories emerged from data analysis. To increase the accuracy and strength of the scientific data in the present study, Guba and Lincoln's (1994) method was used. The researcher also attempted to select the eligible participants carefully; to have close, continuous, and long-term contacts with them; to engage participants in data interpretation process (reviewed by member checking), and to use the opinions of faculty members and participants in various stages of the study, especially in extraction of codes, final reviews (peer checking), and determination of reliability. Moreover, the researcher tried to increase the credibility of the study, as far as possible, by maintaining documentation at all research stages and making it possible to examine other processes through clarifying methodological decisions. In addition, the researcher attempted to provide dependability analysis with a detailed and complete description of the research process. Finally, the researcher tried to provide a context for others' judgments and evaluations concerning transferability using a comprehensive and complete description of the study setting, conditions, participants, and data analysis method. This study was approved by the Ethics Committee of Mashhad University of Medical Sciences in Iran (approval identification code no.: IR.MUMS.REC.1397.112) and also performed according to the Declaration of Helsinki. All 45 participants received both verbal and written information about the study. They also submitted their informed consent forms after being ensured of the voluntary nature of their participation, their right to withdraw from the study at any time and stage, as well as the confidentiality of all their information. It should be noted that each participant took an assumed name for privacy purposes.

### Results

In this qualitative study, 45 participants were interviewed. The participant characteristics are presented in Table 2.

In this study, eventually, 11 subcategories and 2 categories emerged from the data analysis [Table 3].

## Extrapersonal barriers to sexual health education for adolescent boys aged 12–16 years

Lack of clear policies

Lack of specific policies on adolescent sexual health education was highlighted as one of the most important challenges. Concerns about the legal consequences of sexual health education at schools, lack of a general policy on sexual health education at schools, and no legal basis of sexual health education in the community had made it difficult for teachers, counselors, and other stakeholders to face the given challenge. Although all stakeholders acknowledged that, education is essential for adolescent boys and unawareness in this domain could threaten their lives. In this respect, one of the participants said that:

"I can remember a school principal once did not let me teach issues related to sexual health in the classroom even for one session. He believed that it will have legal consequences from the perspective of the Department of Education and oppositions might arise among families." (A cleric male-54 years old).

### Family inadequacy

The next barrier was family inadequacy on adolescent sexual health education. Low parental awareness regarding sexual health, passivity of family concerning sexual health education, negative reactions of family toward this type of behavior, parental fears of deviations following sexual health education, parents' refusal (shame), and emotional weaknesses of family could all slow down answering some sex-related questions raised by adolescents. Elaborating it, one of the participants stated that:

"I think that parental unawareness is one of the major barriers to sexual health education. Most parents have wrong information and they cannot really guide adolescents very well." (A health policy-maker female-54 years old).

#### Social barriers

Social barriers were the third challenge to adolescent sexual health education. Lack of attention paid to sexual health by the community, customs and common beliefs, and community resistance against teaching sexual health behaviors had fell manifest sexual discourse in today's Iranian society in abeyance, and talks about sexual health, especially with adolescents, had become a taboo. For example, one of the participants reiterated that:

"One part of this problem is rooted in the structure of the society. I mean, there are very strict norms as barriers. Customs and common beliefs have become barriers. If laws

Table 1: Examples of semantic units, codes, subcategories, and category

Category	Subcategories	Codes	Semantic units
Extrapersonal barriers to sexual health education for adolescent boys aged 12-16 years	Cultural heterogeneity School inadequacy	Cultural differences of families Inability to manage the classroom for sexual health education	One of the barriers that make us unable to teach sexual health is that children come from different families with various cultures and we cannot teach everyone in the same way Once a time I talked about sexual health in the classroom, but the class was disrupted and everyone began to play a joke

Table 2: The Demographic characteristics of participants

Participants (adults)	Age (years)	Gender	Education level	Participants (adolescents)	Age (years)	Gender	Education level
1	37	Female	PhD	1	14	Male	9 <sup>th</sup> grade
2	48	Male	MSc	2	15	Male	10 <sup>th</sup> grade
3	58	Male	PhD	3	15	Male	10 <sup>th</sup> grade
4	54	Female	PhD	4	12	Male	7 <sup>th</sup> grade
5	50	Male	MSc	5	16	Male	10 <sup>th</sup> grade
6	52	Male	PhD	6	13	Male	8 <sup>th</sup> grade
7	40	Male	PhD	7	13	Male	7 <sup>th</sup> grade
8	49	Male	MSc	8	15	Male	9 <sup>th</sup> grade
9	55	Female	MSc	9	15	Male	10 <sup>th</sup> grade
10	46	Female	MSc	10	16	Male	10 <sup>th</sup> grade
11	42	Female	BSc	11	12	Male	7 <sup>th</sup> grade
12	36	Female	MSc	12	14	Male	9 <sup>th</sup> grade
13	54	Male	Religious Sciences	13	15	Male	10 <sup>th</sup> grade
14	47	Male	MSc	14	14	Male	8 <sup>th</sup> grade
15	48	Female	BSc	15	14	Male	8 <sup>th</sup> grade
16	55	Male	MSc	16	13	Male	7 <sup>th</sup> grade
17	49	Male	Diploma	17	14	Male	9 <sup>th</sup> grade
18	39	Female	BSc	18	14	Male	9 <sup>th</sup> grade
19	38	Female	High school	19	14	Male	8 <sup>th</sup> grade
20	48	Female	PhD	20	16	Male	10 <sup>th</sup> grade
21	50	Male	BSc				
22	35	Female	Diploma				
23	42	Male	BSc				
24	39	Male	Diploma				
25	40	Male	Diploma				

are passed and everything is based on religion, the society resists against these correcting behaviors." (A sociologist male-52 years old).

### Cultural heterogeneity

Cultural heterogeneity in sexual health education for adolescent boys was taken into account as a major barrier. Cultural differences between adolescents, between families and within families, and between parents and children could thus cause opposition from some families against sexual health education for boys. In this regard, one of the participants stated that:

"Not surprisingly, some adolescent boys are living in strict families and it is really unusual to talk about sexual health issues. Although the number of such families is really small, their culture needs to be respected and they must become much more aware of these issues." (Mother-health-care provider-46 years old).

### School inadequacy

The inadequacy of schools in terms of sexual health education for adolescent boys was also regarded as a barrier. Ambiguity in sexual health education at schools, failure to understand the meaning of sexual health education, no special instructors to teach sexual health to adolescents at schools, deficit of sexual health education resources for adolescents, and inability to manage a sexual health education classroom could all lead to negligence of sexual health education for adolescent boys at schools. Accordingly, one of the participants added that:

"For example, my son said that his classmates had laughed and played jokes as a counselor had come into their classroom to talk about sexual issues. He said that that man had been stunned and regretted to say those things because he had not been able to manage the session." (Father-47 years old).

Table 3: Main categories and subcategories related to challenges of sexual health education for adolescent boys

Table 3: Main categori	Table 3: Main categories and subcategories related to challenges of sexual health education for adolescent boys						
Categories	Subcategories	Codes					
Extrapersonal barriers to	Lack of clear policies	Concerns about legal consequences					
sexual health education for adolescent boys aged		Legal prohibition of sexual health education about females					
		Lack of an overall policy on sexual health education at schools					
12-16 years		No legal basis of sexual health education within the community					
		Conflict between science and law and religious teachings on sexual health education					
	Family inadequacy	Negative reactions of family toward adolescent sexual behavior					
		Low parental awareness regarding sexual health					
		Passivity of family concerning sexual health education					
		Emotional weaknesses of family					
		Conflict in parenting in family					
		Parental fears of deviations following sexual health education					
		Parents' refusal (shame)					
		Delays in answering sex-related questions by adolescents					
		Parental opposition toward early sexual health education in adolescence					
	Social barriers	Low social attention to sexual health					
		Traditional barriers to sexual health education					
		Community resistance against sexual health education					
		Sustaining manifest sexual discourse in today's Iranian society					
		Sexual discourse as a taboo					
		Peer pressure					
	Cultural heterogeneity	Cultural differences between parents and children					
		Cultural differences between adolescents					
		Cultural differences between families					
		Family opposition toward sexual health education for adolescents					
	School inadequacy	Preventive principles of sexual health education for adolescents					
		Deficit of sexual health education resources for adolescents					
		Lack of organized education for chastity classes					
		Failure to understand sexual health education meaning					
		Inability to manage a sexual health education classroom					
		School negligence of adolescent sexual health education					
		Ambiguity in sexual health education at schools					
		No special instructors to teach sexual health to adolescents at schools					
		Lack of control over content provided by invited speakers in the field of adolescent sexual health education					
	Cyber threats	Lack of cyber use culture					
	•	Risk of incorrect information from cyberspace					
		Cultural invasion against Iranian adolescents					
	Educational process	Ineffective sexual health education for adolescents					
	inadequacy	Late sexual health education for adolescents					
		Lack of trained and expert individuals					
Intrapersonal barriers to	Uncontrolled emotions	Adolescence love as well as false and transient emotions					
sexual health education	of adolescence	Lack of abstinence and control					
for adolescent boys aged 12-16 years		Friendship with opposite sex as a right					
		Interest in experiencing friendship with opposite sex					
	Adolescent rebellion	Lack of interactions with parents					
		Lack of interactions with teachers					
		Adolescents' battle for independence					
	Information and communication	Lack of raising questions about sex by adolescents					
		Incomplete information about sexual health among adolescents					
	weaknesses	Inaccurate information about sexual health among adolescents					
		Irrational shame about sex-related questions among adolescents					
	Adolescents' concerns	Making fun of asking sex-related questioning among adolescents					
	about being judged by others	Uncertainty about confidentiality among adolescents					
		Fear of losing social status among adolescents					
		Adolescents' concerns about their parents' doubts after asking sex-related questions					

### *Cyber threats*

Lack of cyber use culture, risk of transmitting inaccurate information from the cyberspace, and cultural invasion against Iranian adolescents were included among cyber threats and also barriers to proper sexual health education. As an example, one of the participants stated that:

"Now, for example, I can estimate that there is one pornographic site per three adolescents, and many of them are regrettably in Persian. I think they help adolescents retrieve false information from the cyberspace instead of proper education." (An adolescent boy-16 years old-10<sup>th</sup> grade in humanities).

### Educational process inadequacy

The educational process inadequacy because of inadequate and late education without a trained and expert person in the field of sexual health education was introduced as one of the challenges facing adolescent boys. In this case, one of the participants said that:

"I believe that this educational model is totally wrong. They only talk about adolescent puberty symptoms. They merely try to inform them. I think they have totally ignored emotions, needs, behaviors, and actions. These children do not need such materials right now. I do not know why I have to teach them. I do not really know what happens if I talk about puberty symptoms to children. What if children learn about puberty? They are not going to give an exam and name the symptoms of puberty. It is really funny. Since we do not have other skills, we think that if we give them such information, it will be fine. I think we give them useless information." (A sociologist male-52 years old).

### Intrapersonal barriers to sexual health education for adolescent boys aged 12–16 years

Uncontrolled emotions of adolescence

Among the intrapersonal barriers to sexual health education for adolescent boys were uncontrolled emotions including adolescence love as well as false and transient emotions, lack of abstinence and control, and friendship with opposite sex as a right. In this respect, one of the participants said that:

"All adolescents have transient love. They think that they have fallen in love. Since this experience is great, they think that such an experience is really unique. They think of their love in the classroom. They cannot have a good sleep. They are extremely eager to see one's love. They constantly check their cellphones and log into their Telegram account. They think that they have really fallen in love as the one portrayed in the literature. How can we teach such adolescents that this is merely short-living love? There is no need to fear. It is transient and lasts at least for 6 months." (A sociologist male-52 years old).

### Adolescent rebellion

Adolescents' battle for independence and their rebellion as well as lack of interactions with parents and teachers were among other barriers to sexual health education. For example, one of the participants reiterated that:

"At this age, adolescent boys want to be independent. They never listen to their parents. There have been families referring to the school office and complaining about their disobedient boys and begging us to advise them. These adolescents do not communicate with their families at all and they do whatever they like." (A high school principal male-50 years old).

### Information and communication weaknesses

Lack of raising sex-related questions by adolescents, incomplete and inaccurate information about sexual health among adolescents, and irrational shame about asking sex-related questions were some important intrapersonal barriers identified in this subcategory. Illustrating this issue, one of the participants said that:

"I honestly do not ask my questions about these issues from my family. I really feel embarrassed. I try to find my answers by surfing the Net. I do not know the answers retrieved are right or wrong, but I usually get the faulty information from the Internet. Until now, I have had no chance to talk to my parents." (An adolescent boy-14 years old-9<sup>th</sup> grade).

### Adolescents' concerns about being judged by others

Making fun of sex-related questioning, uncertainty of confidentiality of information, and fear of losing social status among adolescents, and finally adolescents' concerns about being judged by others were included as intrapersonal barriers to sexual health education among adolescent boys. In this regard, one of the participants said that:

"I did not happen to me to ask my questions concerning sexual issues from my family, my teacher, and even my acquaintances; because they know me, and they might think badly of me." (An adolescent boy-16 years old-10<sup>th</sup> grade in humanities).

### Discussion

According to the present study, the barriers of sexual health education to Iranian adolescent boys were classified into two categories of intrapersonal and extrapersonal barriers.

### Extrapersonal barriers to sexual health education for adolescent boys aged 12–16 years

With regard to extrapersonal barriers and the dimension of policy-making, lack of specific policies on adolescent sexual health education, and even existence of restrictive rules for schools showed that sexual health issues had not been a priority in programs developed by authorities in the Ministry of Health and Medical Education and the Department of Education. In this regard, one research, with examining challenges of sexual and reproductive health among adolescent girls, also concluded that health policy-makers had no specific programs to provide care services for adolescent girls aged 10-19 years old; girls were excluded from health-care system since the age of 8 years and included in the system following their first pregnancy, [2] while boys were excluded from health-care system since the age of 8 years and did not return to the system until mid-age. Other researchers similarly believed that sexual health policies needed to be analyzed and then appropriate ideas, interests, strategies, and tactics to ensure the implementation of evidence-based health interventions should be developed in this area as a basis for the advancement of sexual and reproductive health.[17,18] In the present study, this category was among the key priorities for sexual health education among adolescent boys.

In addition, there were concerns about legal consequences of this category in many cases. Community resistance, customs and common beliefs, as well as cultural heterogeneity had led to stigmatized and ignored adolescent sexual issues in society. The fear of increasing adolescent sexual behavior following sexual health education had correspondingly led to no proper planning in this regard. Consistently, several researchers had also reported the same findings.[9,19,20] Sexual health education in Bangladesh was likewise had been found contradictory from the perspective of religion and cultural values ignoring modern sexual health education for adolescents.<sup>[20]</sup> In 2005, the World Health Organization proposed a five-part strategy based on the Cairo Work Program to accelerate health path including strengthening capacity of health-care systems, improving information to set priorities, summoning political will, creating legal and supportive frameworks, and reinforcing monitoring, supervisory, and responsive systems.<sup>[21]</sup> One of the issues faced by Muslim countries is whether laws on sexual health education can be applied to adolescents in Islamic nations or not? Since Islam is known as a religion has a lot to do with aspects of human life, sexual health has been also included in its teachings, which can be a basis to correct sociocultural taboos in this field. [20] In line with these findings, one researcher in Iran also stated that religion and Iranian religious leaders had fundamental roles in addressing sociocultural issues, so attracting their support was of utmost importance in this category.<sup>[2]</sup>

Therefore, modeling a culture-based program and adjusting other countries' experiences with Iranian culture to sexual health education for adolescents should be considered as key elements. In addition, numerous

studies have been conducted on the role of culture in this area. [2,7,9,11] Indeed, sex education for adolescents in Iran is one of the most challenging cultural and social issues. The presence of stigma and a cautious and conservative social attitude have neglected this perspective of adolescent health. Using the potential of religion can be beneficial in changing society's opinions on this important aspect of adolescent life.

The findings of this study showed that families and schools had acted passively concerning sexual health due to lack of knowledge and information, shame and embarrassment in talking with adolescents about sexual issues, fear of deviations following education, and their approach is based on the norms and values in society. Furthermore, Iqbal et al. had pointed to low levels of parental awareness and their disagreement with sexual and reproductive health education.<sup>[22]</sup> A study in Zimbabwe similarly reported that knowledge, attitudes, and perceptions of parents and their inadequate skills in communicating with adolescents had limited sexual health education for adolescents.<sup>[23]</sup> According to the findings of an investigation in Uganda, the most important sources of sexual information for adolescent boys were friends and the media; but parents, teachers, and health-care providers had no active role in this regard due to lack of information on sexual and reproductive health, so they had failed to communicate with adolescents.[24]

As well, cyber threats were identified among extrapersonal barriers to sexual health education for adolescent boys. Safe use of the cyberspace and the need for vigilance of families against its threats had been thus placed in the first priority. With the advent of the Internet and computers and their use in families, an intellectual and emotional separation had also occurred between parents, teachers, educators, and students (children); so parents were required to pay much more attention to their children. Moreover, interactions between parents and adolescents could reduce the harm caused by the cyberspace, especially in terms of sexual and reproductive health; because adolescents could receive right information from their families and they could be also trained based on appropriate behaviors. These findings were consistent with the results of several studies in this domain.[2,25,26]

### Intrapersonal barriers to sexual health education for adolescent boys aged 12–16 years

Considering the intrapersonal barriers; uncontrolled emotions of adolescence, rebellion, as well as information and communication weaknesses of adolescents were introduced as barriers to sexual health education for adolescent boys. Adolescence is a period of transition from childhood into a young age in which emotional excitement increases and adolescents reach puberty. The sense of independence and much more relationships with peers can also characterize this stage of life. Moreover, sense of independence and intense stimulation by sexual incentives can lead to adolescent unrest and aggressiveness.[27] According to one study in Iran, inadequate knowledge of adolescents, poor relationship between parents and children, effects of harmful media, and parents' inadequate supervision of their children were a number of factors increasing risk behaviors among Iranian adolescents as well as undesirable consequences such as rising trend of sexually transmitted diseases in recent years.[7] Adolescents' concerns about being judged by others and uncertainty about confidentiality of their sex-related questions could also lead to a lack of raising sex-related questions from parents and using inappropriate and misleading information resources to find answers to their questions. In this regard, there were several studies reporting the same results.<sup>[7,28,29]</sup>

### Limitations and strength of the study

In this study, qualitative research method was used. The power of qualitative research lies in their ability to deeply collect data and gain a richer understanding of the meaning of phenomena. In fact, the qualitative approach in this study helped us to identify the barriers from the perspective of those who had experienced it in the cultural and social context of Iran. The next strength of this study is the use of key adult understanding and experiences with adolescents in the main population under study. Since the barriers to sexual education for adolescent boys obtained from this study are based on the underlying Iranian context, these findings may not be generalized to other communities. Also in the interview with adolescent boys, only urban adolescent student boys were sampled, so generalization of its findings should be done with caution.

### Conclusion

The results of this study showed that Iranian adolescent boys had been ignored in the domain of sexual health education. There was also no specific and targeted program for their sexual health education in the health-care system and in the Department of Education. Sociocultural norms, passivity of families and schools, as well as wrong information retrieved from the cyberspace were thus proposed as barriers to sexual health education for adolescent boys. In addition, adolescents themselves had problems in their interactions with parents and teachers as a result of physical, psychological, and social changes during this stage of life, which could hinder sexual health education as intrapersonal barriers.

Based on the findings of the study, we can recommend:

Most importantly, boys need sexual health education programs that have been endorsed by policy-makers and religious and social leaders, the negative attitude of the parents and other stakeholders must be changed the issue of sexual health education should be linked to the adolescent curriculum in schools as one of their basic needs and an appropriate training material and clear plan with clear objectives and appropriate content for adolescents, parents and teachers to be prepared. To do that, understanding the various barriers in this area and providing solutions for them is an urgent need.

### Acknowledgments

This article was part of an extensive PhD Dissertation in Reproductive Health fulfilled at Mashhad University of Medical Sciences, Mashhad, Iran, by Fariba Askari, PhD student in Reproductive Health. The authors would like to express their gratitude to the deputy of research and technology of Mashhad University of Medical Sciences for funding this research project (approval identification code no.: IR.MUMS.REC.1397.112) and all participants for expressing their true feelings and perceptions.

### Financial support and sponsorship

The study was financially supported by the deputy of research and technology of Mashhad University of Medical Sciences

### **Conflicts of interest**

There are no conflicts of interest.

### References

- Nair M, Baltag V, Bose K, Boschi-Pinto C, Lambrechts T, Mathai M. Improving the quality of health care services for adolescents, globally: A standards-driven approach. J Adolesc Health 2015;57:288-98.
- 2. Shariati M, Babazadeh R, Mousavi SA, Najmabadi KM. Iranian adolescent girls' barriers in accessing sexual and reproductive health information and services: A qualitative study. J Fam Plann Reprod Health Care 2014;40:270-5.
- Ozer EJ. Youth-led participatory action research: Overview and potential for enhancing adolescent development. Child Dev Perspect 2017;11:173-7.
- Sawyer SM, Afifi RA, Bearinger LH, Blakemore SJ, Dick B, Ezeh AC, et al. Adolescence: A foundation for future health. Lancet 2012;379:1630-40.
- Harhay MO, King CH. Global burden of disease in young people aged 10-24 years. Lancet 2012;379:27-8.
- Available from: https://www.unaids.org/en/regionscountries/ countries/islamicrepublicofiran [Last accessed on 2019 Jul 10].
- Mirzaii Nagmabadi K, Babazadeh R, Shariati M, Mousavi SA. Iranian adolescent girls and sexual and reproductive health information and services: A qualitative study. Iran J Obstet Gynecol Infertil 2014;17:9-18.
- 8. Kapinga OS, Hyera DF. Pupils' perceptions of sex and reproductive health education in primary schools in Tanzania: A phenomenological study. J Educ Pract 2015;6:106-13.

- Morris JL, Rushwan H. Adolescent sexual and reproductive health: The global challenges. Int J Gynaecol Obstet 2015;131 Suppl 1:S40-2.
- Baku E. Parent Training and Parent-Adolescent Communication about Sexuality in Accra Metropolis, Ghana [PhD Thesis]. Ghana: University Ghana; 2014.
- 11. Latifnejad Roudsari R, Javadnoori M, Hasanpour M, Hazavehei SM, Taghipour A. Socio-cultural challenges to sexual health education for female adolescents in Iran. Iran J Reprod Med 2013;11:101-10.
- 12. Chothe V, Khubchandani J, Seabert D, Asalkar M, Rakshe S, Firke A, et al. Students' perceptions and doubts about menstruation in developing countries: A case study from India. Health Promot Pract 2014;15:319-26.
- SeifSA, KohiTW, Moshiro CS. Caretaker-adolescent communication on sexual and reproductive health: A cross-sectional study in Unguja-Tanzania Zanzibar. BMC Public Health 2017;18:31.
- Abdul-Rahman L, Marrone G, Johansson A. Trends in contraceptive use among female adolescents in Ghana. Afr J Reprod Health 2011;15:45-55.
- Bell DL, Garbers S. Early sexual initiation among boys: What should we do? JAMA Pediatr 2019;173:522-3.
- Claussen C. Men engaging boys in healthy masculinity through school-based sexual health education. Sex Edu 2019;19:115-29.
- 17. Ritter S, Kelley K. A call to action planning: Local health department and school partnerships for adolescent sexual health. J Public Health Manag Pract 2019;25:408-10.
- World Health Organization, Regional Office for South-East Asia. Strengthening Intersectoral Collaboration for Adolescent Health. World Health Organization; 2016. Available from: https://apps.who.int/iris/handle/10665/204359 [Last accessed on 2019 May 15].
- 19. Coyle K, Basen-Engquist K, Kirby D, Parcel G, Banspach S, Collins J, *et al.* Safer choices: Reducing teen pregnancy, HIV, and STDs. Public Health Rep 2001;116 Suppl 1:82-93.
- Ali M. Boyshondhi Shikka is Obligatory for Religious and Medical Reasons: Bangladeshi Imams' Perceptions about Adolescent

- Sexual and Reproductive Health Education: An In-depth Interview Study in Bangladesh [MS Thesis]. International Maternal and Child Health Department of Women's and Children's Health, Bangladesh; 2018.
- World Health Organization. Strategy to accelerate progress towards the attainment of international development goals and targets related to reproductive health. Reprod Health Matters 2005;13:11-8.
- Iqbal S, Zakar R, Zakar MZ, Fischer F. Perceptions of adolescents' sexual and reproductive health and rights: A cross-sectional study in Lahore district, Pakistan. BMC Int Health Hum Rights 2017;17:5.
- Svodziwa M, Kurete F, Ndlovu L. Parental knowledge, attitudes and perceptions towards adolescent sexual reproductive health in Bulawayo. Int J Human Soc Sci Res 2016;3:62-71.
- 24. Muhwezi WW, Katahoire AR, Banura C, Mugooda H, Kwesiga D, Bastien S, et al. Perceptions and experiences of adolescents, parents and school administrators regarding adolescent-parent communication on sexual and reproductive health issues in urban and rural Uganda. Reprod Health 2015;12:110.
- 25. Kamalikhah T, Rahmati NF, Karimi M. Barriers of reproductive health education in schools. Tabib E Shargh 2012;14:71-5.
- Pereira F, Spitzberg BH, Matos M. Cyber-harassment victimization in Portugal: Prevalence, fear and help-seeking among adolescents. Comput Hum Behav 2016;62:136-46.
- 27. Malek A, Abbasi Shokoohi H, Faghihi AN, Bina M, Shafiee-Kandjani AR. A study on the sources of sexual knowledge acquisition among high school students in northwest Iran. Arch Iran Med 2010;13:537-42.
- Danquah PA. Sexual and Reproductive Health Education among Adolescents at Awukugua: Ghana [MPhil Thesis]. Ghana: University of Ghana; 2018.
- 29. Mbeba RM, Mkuye MS, Magembe GE, Yotham WL, Mellah AO, Mkuwa SB. Barriers to sexual reproductive health services and rights among young people in Mtwara district, Tanzania: A qualitative study. Pan Afr Med J 2012;13 Suppl 1:13.