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Barriers to Sexual Health Education for Female Adolescents in Schools from Health Care Providers' perspective

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ABSTRACT

Background & aim: Sexual health education to female adolescents in schools is one of the most challenging topics in most parts of the world. This study investigated the barriers to sexual health education for female adolescents in schools from health care providers' perspective.

Methods: This descriptive cross-sectional study was performed on 200 health care providers in the comprehensive health center of Isfahan from October 2019 to October 2020, who were selected using multistage sampling. A valid and reliable researcher-made questionnaire including five sections and 28 questions was used to assess the barriers to sexual health education in areas including individual domain related to the health care providers and female adolescents as well as organizational and socio-cultural domains. Data were analyzed using descriptive statistics.

Results: The most important barriers to sexual health education for female adolescents included insufficient knowledge of health care providers (59%), lack of appropriate communication skills with female adolescents (59.5%) and conflict of sexual education to female adolescents with cultural beliefs of society (56.5%). Among the four domains studied, organizational (31.4±4.93) and socio-cultural domain (27.1±5.12) barriers had higher mean scores.

Conclusion: Insufficient knowledge and skills of health care providers and conflict of sexual education to female adolescents with cultural beliefs of society are the most important barriers to sexual health education for this population. Training of the health team as well as education and culture building in the community for families and the general public can be effective to remove barriers to sexual education for female adolescents.

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Introduction

Sexual health education is recognized as a human right and an undeniable necessity for development (1). Decreased age of puberty and cultural and social changes such as adolescents' access to cyberspace have increased the sexual activity and its complications in adolescents (2,3). Many high-risk behaviors, such as drug and alcohol use and the onset of unsafe sex occur before the age of 18 years (4). Pregnancy, abortion and sexually transmitted diseases are

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lower in countries where provide adolescent sexual health education (5). Evidence suggests that sexual health education interventions for adolescents delay sexual activity, cause them to control their sexual behavior as well as making decisions for using condom (6). However, studies have shown the insufficient knowledge of Iranian girls about sexual and reproductive health issues (7,8). A study showed the limited knowledge of adolescents about this matter (9).

Parents are reluctant to educate adolescents about sexual issues because they are concerned that discussing sexual issues may lead to sexual experiences (10). While evidence shows that sexual health education of adolescents prevents the physical and mental consequences, including sexually transmitted diseases, unwanted pregnancies, and sexual violence (11). Adolescents have unmet needs for sexual and reproductive health due to social taboos, laws, attitudes and judgments of health care providers toward adolescents (12). Since most adolescents enter school before engaging in high-risk sexual behaviors, school is a good place to teach sexual health (13). In addition, the school play an important role in shaping the sexual identity of adolescents (14). Based on the results of an Iranian study, sexual health education is necessary for adolescents (15). Studies have mentioned various causes for adolescents' dissatisfaction with sexual health education in Iranian schools including no talk about sexual issues, unqualified educators, lack of appropriate educational materials, and lack of coordination of sex education with the needs of adolescents (15,16). In some societies, cultural and gender factors also prevent girls from accessing sexual health education services (17).

Adolescents offer many opportunities to improve their sexual health (18). Students believe that the presence of health care providers in schools has led to a positive attitude of parents towards sexual education in schools (19). In developing countries, especially Muslim countries, there are barriers to sexual health education for adolescents including socio-cultural challenges such as negative view of society to sexual education, shame and reluctance to discuss sexuality in public, lack of legal protections, and lack of skilled educators in the field of sexual health education (20-21). In addition, training by health care providers about sexual health education can also affect students' education and communication (22). Strict policies about sexual education for adolescents in schools have caused the educational needs of adolescents not be well met (23).

Previous studies in Iran have examined the barriers of sexual education for adolescents from the perspectives of adolescents and parents (24), but no study assessed the views of health care providers about the barriers to sexual education for adolescents in schools. Despite the importance of the role of schools in promoting adolescent sexual and reproductive health, little information is existing on the barriers and factors facilitating school-based educational interventions on sexual education (25). Therefore, regarding the essential and active role of health care providers in educating sexual issues to adolescents, it is important to evaluate their views in this area. Health care providers have the experience of providing this service and therefore can well express obstacles in a practical and real way by using their experiences. Therefore, the present study was conducted to investigate the barriers to sexual health education for adolescents in schools from health care providers' perspective in Isfahan.

Materials and Methods

This descriptive cross-sectional study was performed on 200 health care providers working in Isfahan from October 2019 to October 2020. Multistage sampling was used to select participants. Since all comprehensive health centers in Isfahan are covered by health centers No. 1 and No. 2, at first, these health centers were selected as a stratified sampling. Then, the comprehensive health centers covered by these centers were considered clusters and according to the number of health care providers working in these centers, several comprehensive health centers were randomly selected for sampling of health care providers.

Inclusion criteria were health care providers with bachelor's degrees and above in the fields of midwifery and public health who referred to schools for health education. The sample size was estimated as 200 samples considering a type I error of 0.05, p =0.5, and accuracy level of 0.07. The health workers who were reluctant to continue to participate in the study and those

who did not complete more than 5% of the questionnaire were excluded from the study. A researcher-made questionnaire was used to collect the data. The questionnaire's items were generated based on the literature and the objectives of the research. Standard questionnaires which assessed the barriers to sexual education for adolescents were reviewed and the initial questionnaire was designed in four areas: individual (health care providers and adolescents), organizational and socio-cultural area. The initial version of the questionnaire consisting of 30 questions was developed. The opinions of 15 expert faculty members in sexual and reproductive health were used to confirm the formal validity and qualitative content. To confirm the validity of the tool, the Content Validity Ratio (CVR) (0.49) and Content Validity Index (CVI) (0.79) indices were calculated based on the opinions of experts related to the subject. After deleting two questions, the final questionnaire, which included 28 questions, was developed. A pilot study was performed on 40 health care providers to evaluate the reliability of the questionnaire. The reliability of the questionnaire was confirmed after statistical analysis and with Cronbach's alpha of 0.74 for individual barriers questionnaire (health providers and adolescents) and Cronbach's alpha of 0.87 for organizational and cultural barriers questionnaire. The questionnaire consisted of five sections and 38 questions. The sections were: Part One: Demographic Information (10 questions), Part Two: Individual Barriers Questionnaire for health care providers (6 questions), Part Three: Individual Barriers Questionnaire for Adolescents (7 questions), Part Four: Organizational Barriers Questionnaire (8 questions), section 5: Questionnaire to study socio-cultural barriers (7 questions). The questions followed a 5-point Likert scale. The maximum and minimum scores were 1 and 5, respectively.

Data was collected by the researcher referring to the research settings. After coordination with the officials of these centers, the researcher stated the objectives of the study and the specifications of the questionnaire for the employed personnel. If they wish to participate in the study, a specific time was determined for their presence in the center to complete the questionnaire. The researcher then referred to the center at the determined time and asked them to complete the questionnaire. If there is a need to explain the components of the questionnaire, the necessary explanations were given to them by the researcher. The time to complete the questionnaire was 30 to 45 minutes. Participation in this study was completely anonymous and written informed consent was obtained from the participants. Data were analyzed using descriptive statistics (mean, standard deviation, frequency, and percentage) by SPSS software version 20.

This study was approved by the Research Ethics Committee of the Isfahan University of Medical Sciences, Isfahan, Iran. (Ethics Code: IR.MUI. RESEARCH.REC.1398.380). All ethical principles were considered.

Results

Most of the participants in this study had a bachelor's degree in midwifery. Other demographic characteristics of the studied units were shown in Table 1.

Mean age of the samples was 33.5±8.19 years and mean of work experience was 8.01±6.94 years. The results showed that 21.5% of the health care providers had a history of teaching sexual health to adolescents and 20% of the health care providers had completed a sexual health retraining course for adolescents. The highest percentage (%59) of agreement in the field of individual barriers of health care providers was the lack of knowledge of health care providers to teach sexual health to adolescents.

The highest percentage (%57.5) of agreement in the field of individual barriers was related to adolescents with an unequal level of adolescents' knowledge about sexual issues. Other cases related to these two areas were reported in Tables 2 and Table 3.

Table 1. Frequency distribution of demographic and individual characteristics of the studied units (N=200)

Variables	N (%)
marital status	
Married	127(63.5)
Single	69(34.5)
divorced	2(1.0)
Widow	2(1.0)
Field of Study	
Midwifery	190(95)
Family health	7(3.5)
public health	3(1.5)
Grade	
Associate's degree	4(2.0)
Bachelor's degree	143(71.5)
Master's degree	42(21.0)
PhD	11(5.5)
Employment Status	
Permanent contract	58(29.0)
Fixed-term contract	43(21.5)
Short-term contract	57(28.5)
Training contract	42(21.0)

Table 2. Frequency distribution of the perspective of the health care providers on individual barriers related to health care providers and adolescents

Individuals barriers	Strongly disagree N (%)	Disagree N (%)	Undecided N (%)	agree N (%)	strongly agree N (%)	total sum N (%)
Insufficient knowledge to teach sexual health to adolescents	3 (1.5)	10(5)	17(8.5)	118 (59)	52(26)	200(100)
Feeling ashamed to answer students' questions about sex	10(5)	42(21)	33(16.5)	93 (46.5)	22(11)	200(100)
Lack of proper communication skills to communicate and teach sexual health	5(2.5)	14(7)	13(6.5)	119(59.5)	49(24.5)	200(100)
Lack of positive attitude towards sexual health education	9(4.5)	35(17.5)	28(14)	84(42)	44(22)	200(100)
Feeling unable to answer students' questions about sexuality	5(2.5)	44(22)	33(16.5)	89(44.5)	29(14.5)	200(100)
Spending less time teaching sexual health in schools than other educational topics **adolescents**	6(3)	17(8.5)	20(10)	78(39)	79(39.5)	200(100)
Lack of feeling the need for adolescents to receive sexual health education in schools	46(23)	77(38.5)	22(11)	44(22)	11(5.5)	200(100)
Improper reactions and disruption of the classroom by students	14(7)	46(23)	50(25)	72(36)	18(9)	200(100)
Adolescents' level of sexual awareness is not the same	4(2)	15(7.5)	19(9.5)	115 (57.5)	47(23.5)	200(100)
prefer to receive sexual information from peers	11(5.5)	37(18.5)	25(12.5)	89(44.5)	38(19)	200(100)
prefer to receive sexual information from mass media and cyberspace	7(3.5)	29(14.5)	22(11)	105(525)	37(18.5)	200(100)
Feelings of shame to asking questions about sex in schools	5(2.5)	22(11)	36(18)	105(52.5)	32(16)	200(100)
Students do not trust health care providers to ask confidential questions	11(5.5)	30(15)	36(18)	102(51)	21(10.5)	200(100)

The highest percentage of agreement on organizational barriers was related to the lack of media facilities for sexual health education in schools (51.5%) and the opposition of school principals and staff to sexual health education for adolescents (49.5%). The highest percentage (56.5%) of agreement in the field of socio-cultural barriers was related to the conflict between sexual education of adolescents and cultural beliefs of society. Other issues related to organizational and cultural barriers were presented in Tables 3 and Table 4.

According to the prioritization of barriers to sexual health education in schools from the perspective of health care providers, organizational barriers as the first priority (43.5%), socio-cultural barriers as the second priority (41%), individual barriers related to health care providers in the third priority (39.5%) and individual barriers related to adolescents were identified as the last priority (37%). To determine the most important barriers to sexual health education for adolescents in schools from the perspective of health care providers, a score of 1 to 4 (score 1 is the most important barrier, score 4 is the least important barrier) was given to different areas of barriers. The participants were asked to score The individual barriers (for health care providers and adolescents), socio-cultural barriers and organizational barriers. In examining the mean score of barriers, organizational (31.4±4.93) and socio-cultural (27.1±5.12) domain barriers had higher mean scores, respectively. These results were consistent with the results of prioritizing barriers from the perspective of health care providers.

Table 3. Frequency distribution of the perspective of the health care providers on organizational barriers

Organizational barriers	Strongly disagree N (%)	Disagree N (%)	Undecided N (%)	agree N (%)	strongly agree N (%)	total sum N (%)
Lack of policymakers' support for sexual health education programs in schools	0	2(1)	29(14.5)	94(47)	75(37.5)	200(100)
School principals and staff oppose sexual health education to adolescents in schools	2(1)	13(6.5)	34(17)	99(49.5)	52(26)	200(100)
Lack of media facilities in schools to teach sexual health	4(2)	15(7.5)	21(10.5)	103(51.5)	57(28.5)	200(100)
Lack of adequate physical space for sexual health education in schools	2(1)	30(15)	25(12.5)	93(46.5)	50(25)	200(100)
Lack of proper coordination between Ministry of Education and the health system to educate sexual health to adolescents	2(1)	8(4)	25(12.5)	97(48.5)	68(34)	200(100)
Lack of sufficient time to teach sexual health to adolescents	6(3)	34(17)	27(13.5)	85(42.5)	48(24)	200(100)
Lack of cooperation between parents and school staff in the field of sexual health education for adolescents	1(0.5)	29(14.5)	39(19.5)	97(48.5)	34(17)	200(100)
Lack of retraining courses in sexual health education for adolescent	2(1)	13(6.5)	20(10)	94(47)	71(35.5)	200(100)

Table 4. Frequency distribution of the perspective of the health care providers on socio-cultural barriers

Socio-cultural barriers	Strongly disagree N (%)	Disagree N (%)	Undecided N (%)	agree N (%)	strongly agree N (%	total sum N (%)
Contradiction of sex education to adolescents with the cultural beliefs of society	6(3)	10(5)	26(13)	113(56.5)	45(22.5)	200(100)
Contradiction of sex education to adolescents with the religious beliefs of society	8(4)	15(7.5)	32(16)	95(47.5)	50(25)	200(100)
Parents do not pay attention to the sexual needs of adolescents	3(1.5)	19(9.5)	35(17.5)	94(47)	49(24.5)	200(100)
Lack of community attention to the sexual needs of adolescents	3(1.5)	12(6)	23(11.5)	100(50)	62(31)	200(100)
Families worry about increasing sexual awareness and the incidence of slavery among adolescents in schools	3(1.5)	15(7.5)	31(15.5)	91(45.5)	60(30)	200(100)
Negative parents' perception of the concept of sexual health education to adolescents in schools	7(3.5)	18(9)	32(16)	99(49.5)	44(22)	200(100)
Negative community perception of the concept of sexual health education to adolescents in schools	4(2)	26(13)	26(13)	88(44)	56(28)	200(100)

Discussion

The results of the present study showed that the most important barriers in the individual domain related to health care providers were insufficient knowledge and lack of appropriate communication skills for sexual health education to adolescents and also feeling ashamed to answer adolescents' sexual health questions.

Studies showed that health care providers do not have the necessary skills to communicate with adolescents (26,27) and their judgment of adolescents has made adolescents reluctant to refer health centers to receive sexual health services (16). In Iran, a study of the challenges of female adolescents in accessing sexual and reproductive health information and services showed that the unpreparedness of health care and inadequate information of health care providers in the field of sexual and reproductive health are the obstacles to adolescent access to sexual and reproductive health services (15).

The results of the present study showed that a small percentage of health care providers have completed training or retraining of sexual health education to adolescents, and this can cause insufficient knowledge to provide sexual health education and communication with adolescents. Contrary to the results of this study, the results of a study showed that health care providers have sufficient knowledge to teach sexual health to adolescents, but their performance is particularly poor in educating taboo subjects (masturbation, contraception , and homosexuality) to adolescents (28). Therefore, it is necessary for managers and health policy makers to raise the level of awareness and skills of health care providers on the subject. Providing educational programs during the Student period as well as continuing education programs related to adolescent sexual education can be effective in this regard.

The results of the present study showed that the most important barriers in the individual domain of adolescents in sexual health education in schools were: inequality of knowledge and awareness of adolescents about sexual and reproductive health, adolescents' preference to receive sexual information from mass media and cyberspace, feel embarrassed to ask questions about sexual health, and adolescents' distrust to health care providers for asking confidential questions. According to another study, inequality in adolescents'

awareness of sexual health, inequality of mental maturity and sexual experience in adolescents caused challenges in sexual health education to adolescents (29). Previous studies conducted in Iran showed that the level of knowledge and awareness of adolescents about reproductive health is not the same; they reported higher level of knowledge and awareness of adolescents with better economic and social conditions. Also, students whose mothers had higher education had more information about menstrual health and puberty (30,31). Teenagers are embarrassed to ask questions about sexual and reproductive health because they are afraid of being judged by others, and this causes them to receive information from peers who do not have enough information about it or have incorrect information from cyberspace (16,32). Most health care providers do not have the ability to communicate properly and teach sexual health to adolescents and have not passed the appropriate training in this area. As a result, adolescents do not go to health care centers due to fear of being stigmatized, and if health care providers go to school, the adolescents refuse to ask questions about sexual health due to concerns about the confidentiality of conversations.Therefore, it is necessary to create the conditions that adolescents can ask their questions and problems about sexual issues in accordance with their socio-cultural and family background (29,33).

According to the results of the present study, the most important obstacles in the organizational field were: lack of educational and media facilities for sexual health education in schools, school principals opposed to sexual health education for adolescents, and lack of cooperation between education and the health system. A study of the experiences of female adolescents from sexual health education in Iranian schools showed that adolescents are not satisfied with sexual education in schools and their needs are not well met. The reason for this dissatisfaction is the lack of appropriate educational facilities and lack of coordination of sexual education with the needs of adolescents (15). Other studies showed that school staff's opposition to sexual education is due to the lack of support from the education system for sexual health education in schools. In addition, in the case of teaching sexual health issues, due to not enough time and restrictive policies in schools, they reduce the number of training sessions and remove some content related to sexual health issues. Therefore, adolescents receive the education which does not fully meet their needs (34,35). Lack of support from school management for health care providers limits their education, especially in the field of sexual health (19). Policymakers in the ministry of education and health oppose proper education and planning in this area due to fear of increasing sexual behavior following sexual health education to adolescents, while numerous studies have shown that sexual education to adolescents does not increase sexuality (16, 36,37). Lack of cross-sectoral cooperation between ministries and departments providing services to adolescents is one of the challenges of sexual health education to adolescents, and the conservative view of politicians has led to poorly address this challenge (29).

The findings of the study by Shariati et al (2014). showed that the Ministry of Health did not take appropriate action to involve the Ministry of Education and the Ministry of Sports and Adolescents in educating sexual and reproductive health to adolescents (16). Health managers and policymakers should consider the need for sexual education for adolescents.

Restrictions imposed by the government on NGOs mean that non-governmental organizations also have limited activities to educate sexual health to adolescents, and not all adolescents have access to these services (29).

The last category of barriers in the present study was socio-cultural barriers. In this study, the most important socio-cultural barriers in sexual health education to adolescents were: the conflict between sexual education to adolescents with the cultural beliefs of society, lack of community attention to the sexual needs of adolescents, and parents' negative perception of the concept of sexual health education to adolescents in schools. Since in Muslim countries such as Iran, sexual activity before marriage is not culturally and religiously permissible, teaching sexual health to adolescents is considered contrary to cultural and social beliefs and values, while today due to

declining puberty age and easy access of adolescents to sexual content, premarital sex has increased in adolescents (38,39) .Cultural taboos have caused adolescents to hide problems related to sexual and reproductive health due to a lack of sufficient information in this field (40,41). Most people in Iranian society believe that adolescents don't have premarital sex, but the results of a study showed that 28% of adolescents aged 15 to 18 years have experienced sexual intercourse at least once (9). Traditional norms have also influenced the relationship between parents and adolescents. Parents avoid talking to adolescents about sex, or prefer to talk only to their same-sex children because they feel ashamed (42). As a result, conservative attitudes and society's disregard for adolescents' sexual needs has prevented them from accessing accurate sexual and reproductive health information. Negative parents' perception of sexual health education to adolescents is one of the major barriers to sexual health education in schools (43). Parents are concerned that talking about sex with their children will lead them to have sex. As a result, they prefer to postpone sexual education for their children until marriage. Some parents also believe that their children receive sexual health information from cyberspace and there is no need to talk to them about this issue (42), while studies show that most adolescents prefer to receive sexual and reproductive health information from their parents (40,44). However, contrary to the results of previous studies, studies conducted in developed countries show that parents support sexual health education for adolescents in schools and believe that sexual education should start from primary or secondary school (45,46). This difference in the results shows the important role of socio-cultural issues on parents' attitudes toward sexual education in schools. In the present study, according to the perspective of health care providers, the main barriers to sexual health education for adolescents in schools were organizational and socio-cultural barriers. The other study conducted in Iran have also considered socio-cultural factors as one of the main obstacles to sexual health education for adolescents (24).

Policymakers have a cautious view of sexual health education, especially in schools, due to cultural beliefs in society, and as a result, no effective action has been taken to remove organizational barriers. While designing sexual health education programs appropriate to the cultural beliefs of the community and the needs of adolescents in school curricula reduces community sensitivity to this issue and improves the performance of health care providers in sexual health education in schools. Removing the barriers requires politicians to understand the importance of educating sexual health to adolescents, removing restrictive laws, and allocating appropriate educational facilities to schools. The participation of ministries providing services to adolescents with the Ministry of Health and the cooperation of NGOs to plan and provide educational content based on the culture and values of society and training skilled health care providers to educate sexual health to adolescents play an important role in removing the barriers. In order to remove the obstacles to the sexual education of adolescents in schools, it is necessary for all related organizations to plan in a coordinated manner.

One of the limitations of this study is that it was a descriptive study and showed only the perspective of female health care providers who had a history of sexual health education for adolescent girls, so its generalizations should be accompanied by caution. The strength of this study was that it examined different types of barriers to sexual education in a categorized manner.

Conclusion

Insufficient knowledge and skills of health care providers and conflict of sexual education to adolescents with cultural beliefs of society are the most important barriers to sexual health education for adolescents. Training of the health team as well as education and culture building in the community for families and the general public can be effective in removing barriers to sexual education for adolescents.

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Conflicts of interest

Authors declared no conflicts of interest.

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