

Barriers of Adolescents' Access to Reproductive and Sexual Health Services in Iran: A Systematic Review

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Abstract

Background: Adolescence is an important period in human life and the low-level access of adolescents to reproductive and sexual health services is a concern because preventive, diagnostic and therapeutic services are needed for healthy sexual and reproductive behaviors. This study was conducted with the aim of considering the barriers against adolescent access to reproductive and sexual health services in Iran.

Materials and Methods: All Iranian qualitative and quantitative studies which were published without time limit were entered in this systematic review article. The investigation was performed in the international databases such as Scopus, Medline, ProQuest, and Cochrane Library and national databases such as Magiran, SID, IranDoc, and Barakat Knowledge Network System. Keywords were selected based on the Mesh and include: "Youth", "Teenager", "Adolescent health service", and "Iran", combined with the Boolean OR and AND operators. Ultimately, two researchers reviewed articles for the quality appraisal (Newcastle-Ottawa tool for observational studies and JBI-QARI tool for qualitative studies), and extracted their main findings, independently.

Results: Finally, 10 articles (with 1,933 population) that comprised including criteria were selected. Articles were quantitative (n=8), and qualitative (n=2) types and their year of publication varied from 2009 to 2018. Barriers against adolescent access to reproductive and sexual health services were classified into four main categories (individual barriers, structural barriers, social barriers, and policy barriers).

Conclusion: Based on the results, the barriers of adolescent access to reproductive and sexual health services include individual, structural, social, and policy barriers. Because the development of adolescents' demands is crucial for all societies, through identification and removal of these barriers, we can promote the access of the youth to adolescent health services.

Key Words: Adolescent, Barrier, Health Care Service, Iran.

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1- INTRODUCTION

Adolescence is an important period of human life (1). In fact, adolescence is a transition from the childhood to adulthood during which the youths aged 12-18, experience physical, emotional, social and emotional changes (2). Throughout the world, almost one billion of the world's population includes teens, 70% of which are living in developing countries (3). Adolescents are more likely in danger of sexual and reproductive problems, such as pregnancy, abortion, sexually transmitted infections (STIs), human immunodeficiency virus (HIV/AIDS), and other fertility-threatening problems (4, 5).

The results of the study showed that 11% of all births and 14% of maternal mortality worldwide occur among women aged 15-19 (6). In the eastern Mediterranean region, Iran, after Egypt, is ranked second in terms of the highest population of young people, and its proportion of the young population is equal to the global proportion. According to the 2011 census, the youth (10 to 24 years old) were 27.5% of the total population, while adolescents (10-19 years old) constituted 16.34% of the total population (7); also, the results of a study in Iran showed that the most reckless behaviors among the sexes (55.6%) occur at the age of 16 to 21 (8).

One of the most important and crucial needs of adolescents is access to reproductive and sexual health services separately from adults (9). Adolescents who are seeking to achieve reproductive and sexual health services may encounter adult resistance and considerable obstacles. This age group has less information, experience and facilities than adults to preserve their fertility health (9, 10). Therefore, low access of teens to reproductive and sexual health services is a concern because adolescents need prophylactic, diagnostic and therapeutic services for having a healthy reproductive

and sexual behavior (11). In 2014, the World Health Organization (WHO), in regards to the 1.3 million teenage deaths in 2012 because of preventable, treatable and natural disasters, published a report on "Health for Adolescents in the World" to conserve and promote adolescent health (12). According to the WHO recommendation, Youth-Friendly Health Services (YFHS) are to provide fair, effective, accessible, acceptable and appropriate health services for adolescents (13, 14), and the aim of the provision of reproductive and sexual health services for adolescents is preparing a supportive environment; developing knowledge, attitude, skill, and behavior of reproductive health; and increasing the use of health services (3, 15). Despite teenagers being in danger of having high-risk sexual behaviors, they receive fewer reproductive and sexual health services due to various barriers (16). In a number of studies, the barriers to youth for accessing to reproductive health services included: obstacles to access to services (such as ease of access to services); obstacles to the delivery of services (such as waiting time to receive services); quality of service (such as inappropriate behavior of service provider towards teenager); and finally, social obstacles (non-confidentiality of services) (17, 18).

In a study in South Africa, the barriers of access to reproductive and sexual health consisted of: lack of confidentiality and privacy, waiting time duration, unpleasant work hours, distance from clinics, and parents' fear when they came to the clinic (19). In another study, due to social stigma, fear of non-confidentiality of services, and the prohibition of their parents and tutors, teenagers were less likely to have reproductive health care (20). Abedian et al. showed that the barriers of adolescence access can be classified in three groups: individual barriers (lack of awareness of the provision

of reproductive and sexual services to adolescents), interpersonal barriers (peer pressure), and organizational barriers (lack of privacy, lack of politicians' support from reproductive health programs for youths) (13, 21). On the other hand, health care providers because of their high workload tended to not provide health services for teenagers, as well as an inappropriate location and time of providing services in these centers, teenagers access was often disturbed (22).

In the study of Ramezan-Khani et al., obstructions of access to reproductive health services were considered through key informants such as parents, service providers, specialists in the Ministry of Health, they concluded that due to the lack of accurate definition of reproductive and sexual rights for adolescents in the country's policy, the lack of adequate budget allocation for these services (including financial and human resources), and poor cooperation amid relevant organizations, adolescents reproductive health programs will often be ineffective (23). Therefore, as a systematic study has not been conducted about the barriers of adolescents' access to youth-friendly health services, in Iran, this systematic study aimed at assessing barriers of adolescents' access to reproductive and sexual health services was performed.

Teens are the positive force of society in the present and future. They face more intricate problems than past generations and often get less support. The expansion of teenagers' demands is a vital issue for all societies (3). Therefore, the results of this study can help us to identify and eliminate barriers of adolescent access to health services, thereby access of adolescents to adolescent health services will be enhanced.

2- MATERIALS AND METHODS

2-1. Data sources

This study is a systematic review. The research population included articles in the field of reproductive health services for adolescents in Iran that were indexed in one of the Internet databases. Web of Science, Scopus, ProQuest, Cochrane library and Medline (via PubMed) as International searched databases, SID, Magiran, IranDoc and IranMedex (Barakat Knowledge Network System) as National searched databases and search engine of Google Scholar were searched in Persian and English languages. To preserve all valuable data, no time limitation was allocated and all articles were considered by two independent researchers. Furthermore, all papers were presented at national seminars, congresses, and reports, as well as the dissertations connected to reproductive and sexual health services of adolescents, were assessed. If there were abstracts of related articles, accessing full article the corresponding author was contacted.

2-2. Search strategy

To find relevant articles in English-language websites, keywords were selected according to MESH and included "Adolescent", "Youth", "Teen", "Teenagers", "Young", "Health Services", "Health Access", "Clinics", "Health Delivery", "Health Center", "Adolescent Health Service", "Reproductive Health Services", "Sexual" and "Health Service", "Youth-Friendly", "Delivery of Health Care", "Inhibitor and Barrier". They were combined through Boolean operators OR and AND (**Table.1**). The used keywords to search in Persian databases included a combination of "Adolescent", "Puberty", "Peers", "Health Services", "Health Centers", "Reproductive Health Services", "Sexual Health Services", "Teen" and "Iran".

Table-1: Keywords for search in Medline database (via PubMed).

Term	Search Terms
Adolescent	Adolescent*[MeSH] OR teen*[tiab] OR "young adult"[MeSH] OR "young adult*" [tiab] OR youth*[tiab] OR "homeless youth"[MeSH]
Health Services/ Access to Health Services	"Adolescent health services"[MeSH] OR "health service*" OR "health care" OR "medical care" OR (accessibility AND "health services") OR "health service* accessibility" OR "Availability of Health Services" OR "access to health service*" OR "access to health care" OR "access to medical care" OR "access* health service*" OR "access* health care" OR "access*medical care"
Barrier/Facilitator	Barrier* OR Hurdle OR Promote* OR Obstruct* OR Facilitate* OR Support* OR Cause* OR Encourage*
Iran	Iran[MeSH] OR "Islamic Republic of Iran"

2-3. Study selection

The arrangement of the process steps was done firstly by searching the relevant databases, 580 articles were found and entered into the Endnote software, after that 142 repeated articles were eliminated by Endnote because of duplication, and title and abstract of 438 articles were reviewed. 417 articles due to not being relevant with the aim of the research were removed, and then the full text of the rest of the articles from the previous steps (21 articles) was estimated. Ultimately, among the rest of the selected papers, 10 articles that contained inclusion criteria of our study were chosen. The quality of the articles was considered by two authors independently. To organize the studies, Endnote software was used. Inclusion criteria involved: publication of an article in Persian or English language, operation of research in Iran, youth and adolescents

10-24 years old, key informants, access to the full text of articles and original academic articles (including quantitative and qualitative articles). Review articles and letters to the editor-in-chief, because they did not use the primary data, were not selected. Through studying the titles and abstracts of articles which had inclusion criteria by the researchers carefully, many of them were excluded due to not being relevant to the purpose of our study. If there was no feasibility to make a decision on the article after studying the title and the abstract, the full text of it was read. To ensure the retrieval of all documents, a list of articles' references was searched as well. After completing the articles' investigation, 10 final papers were selected by using flowchart (**Figure.1**).

2-4. Quality Assessment

The quality of the articles was considered by two authors independently. The quality of observational studies was evaluated by using the edited Ottawa-Newcastle scale (observational studies version) (24). This scale appraises the articles in terms of the selection process (in four sections including being expressive samples, sample size, non-response, and measurement tool), comparability (one-part including, checks the confounding and other influential factors), and results (two aspects: evaluation of results and statistical tests). Based on the Newcastle-Ottawa scale, articles were scored from zero (the weakest study) to 10 (the strongest study). To preserve the data, studies with a lower score than the average scores (less than 4 scores) were pondered as low quality (**Table.2**) (*Please see the table at the end of paper*). Quality of qualitative articles was assessed by using the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI). This scale has a grading system and based on that the articles are scored from zero (the weakest study) to 10 (the strongest study) (25). Therefore, all studies according to relevant

checklists were scored by two researchers (**Table.3**) (Please see the table at the end of paper). Discussion method to achieve consensus, and an external referee if there was a difference in the announced score of the articles, were used. Finally, if the articles were refused, the reasons for rejecting were mentioned.

2-5. Data extraction

Finally, for extracting data from the text of these articles, two researchers using a

researcher-made form, independently extracted information such as the general traits of the articles (for instance the first author, year of publication), the type of study (qualitative or quantitative), the place of research operation, the sample size and target group, the profile of participants (demographics, age, etc.), barriers, issues, and challenges of access to youth-friendly health services, and authors' conclusions (**Tables 2, 3**).

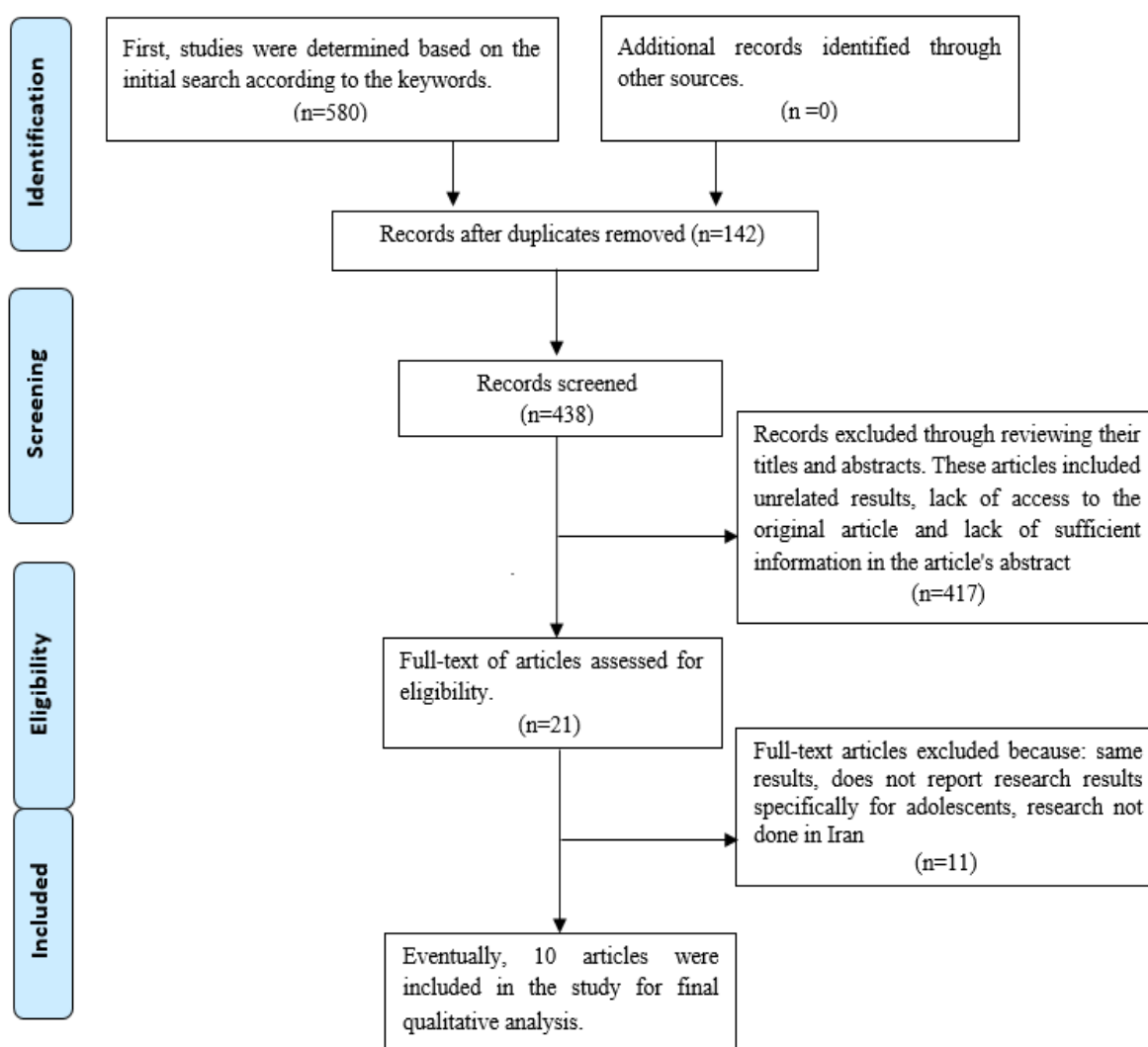


Fig.1: Flowchart for selection of studies.

3- RESULTS

In this study, all published articles were deliberated based on the research purpose in electronic databases. In the first step, by the basic search with the relevant keywords, 580 articles (PubMed=81; Scopus=247; Web of Science=77; ProQuest=113; Cochrane Library=33; SID= 7; MagIran=13; IranDoc (Barakat Knowledge Network System) =3; IranMedex=6) were extracted. Then, after removing repetitive articles by reviewing titles and considering the rest of them through the abstract and their full text, finally, 10 articles were assessed (Figure.1).

The articles were both quantitative and qualitative. The year of release varied from 2009 to 2017. Nine articles in English and one article in Persian were published. Sampling method in most qualitative

studies was purpose-based and semi-structured deep interviews from the target group; however, in 7 qualitative studies, in addition to a personal interview method, group discussion (FGD) with adolescents and key informants were applied to collect the data. In most qualitative and quantitative studies, the target group was both youths and key informants. The traits of the reviewed articles are cataloged in Tables 2, 3 (Please see the table at the end of paper). After reviewing the results of the research, barriers to adolescent access to reproductive and sexual health services were classified to four main categories: 1) personal barriers, 2) structural barriers of services, 3) socio-cultural barriers, and 4) policy barriers. Amid all factors, socio-cultural and structural barriers were more frequent than individual barriers (Figure.2).

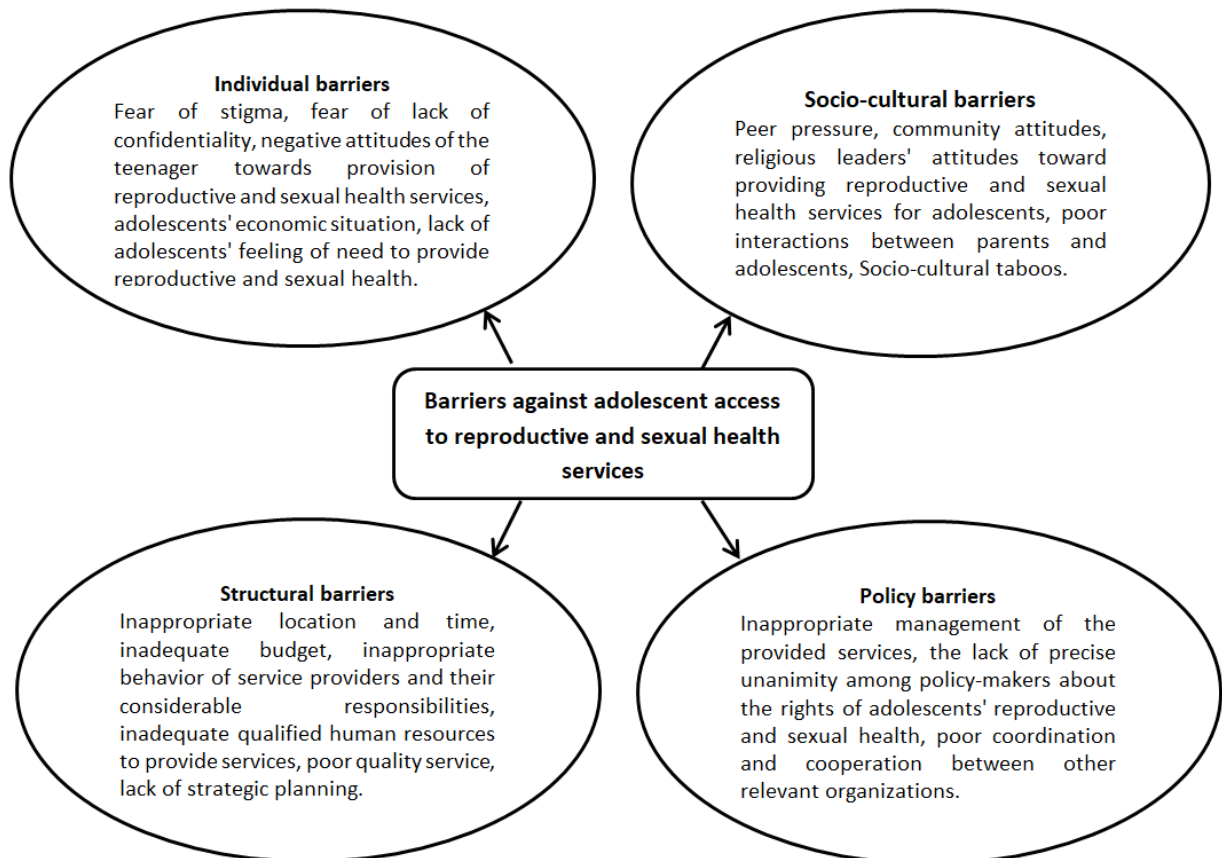


Fig.2: Barriers against adolescent access to reproductive and sexual health services.

3-1. Individual barriers

In this study, 7 studies were considered individual barriers (13, 21, 26-30). The most important individual barriers were: reluctance of teenagers to SRH (Sexual Reproductive Health) educational content provided by these centers, the lack of adolescents' feeling of need to provide reproductive and sexual health services (13, 21), the lack of adolescents' skill and knowledge for the use of preventive reproductive and sexual health services (26, 29), the negative attitude of the teenager towards reproductive and sexual services (27), the shame and embarrassment of teenagers for going and receiving reproductive and sexual health services (26, 30), fear of stigma (13, 30), fear of lack of confidentiality (29-31), and the adolescents' economic situation (28). Whereas access to information about reproductive and sexual health is easy for teenagers, most of them do not know how to use these services and do not have the essential skills (26). Most youths feel shame and are embarrassed to talk about sexual and reproductive health issues with their parents and service providers. Furthermore, for receiving reproductive health services, such as contraceptives, they do not tend to receive it from the service providers and would like to receive it from their friends (26). In a study, the most important barrier of youth access to reproductive and sexual health services was reported individual barrier and the most important individual barrier, fear of stigma and humiliation (13).

3-2. Structural barriers of services

In 9 studies, structural and organizational barriers were considered, the majority of which were extracted through an interview with key informants. The most important structural barriers were the lack of appropriate training programs for adolescents (13, 21), inappropriate location of centers and the lack of confidentiality of

services (13, 21, 29, 32), inappropriate time of service provision (13, 21, 29), inappropriate behavior of service providers and their considerable responsibilities (13, 21), inadequate budget for the establishment of these centers for the provision of reproductive and sexual health services to adolescents (28), lack of strategic planning for reproductive and sexual health of adolescents (23, 28), inadequate qualified human resources to provide services (23, 28, 29, 31), and poor quality service (13, 26, 29). In structural barriers, the meaning of inappropriate time is a clash of work hours of the provider center with the free times of adolescents, an allocation of low time to provide services for youths according to the different burdens of providers and the long waiting time for teenagers to receive these services. The absence of privacy due to the shortage of an appropriate room for education and counseling is another structural barrier (13). Akbari et al. (2013) showed that villages cannot access to these kinds of facilities, conveniently. Karamat et al. (2013) claimed that the lack of youth-friendly centers in all cities was an important structural barrier (unfair service allocation) (26, 28).

3-3. Social-cultural barriers

In all of the studies, socio-cultural barriers were explained as one of the most important barriers against adolescents for accessing reproductive and sexual health services. The most significant socio-cultural barriers in these studies were the various individual views about the provision of reproductive and sexual health services for teenagers (26), religious leaders' attitudes toward providing reproductive and sexual health services for adolescents (13, 21, 28, 30, 31), emulating non-Islamic patterns in training and providing services to adolescents (30), community attitudes about reproductive and sexual health services for adolescents (27, 29, 31), negative attitudes of services

providers towards provision of reproductive and sexual health services for youths (31), the transfer of unpleasant experiences of others from providing sexual and reproductive health services to youths (32), peer pressure about not receiving reproductive and sexual health services due to undesirable experiences or other reasons (13, 21), poor interactions between parents and adolescents (26, 28), the existence of social cultural taboos in the provision of sexual and reproductive health services for adolescents (26-28, 30), the situation of schools (26, 29), the absence of community's knowledge of the location where reproductive and sexual health services could be provided for this group (31), the gap between norms and social behaviors (26), and social concerns about the negative impact of sexual education on adolescents (30).

One of the socio-cultural barriers is the variety of individuals' opinions about providing reproductive and sexual health services. The majority of traditional families hold the view that sex is a taboo before marriage, thereby they are opposed to providing these services for teenagers (26). According to the studies, religious leaders' attitude towards the provision of these services is one of the most important socio-cultural barriers, which based on most studies, is negative (13, 21, 28, 30); however, Shariati et al. (2014) in their study found that not only is the religious leaders' attitude not negative in this field, but the religious potential not being applied in strategic planning for providing these services could be accounted as an obstruction (31). Another social barrier against adolescent access to reproductive and sexual health services was the transfer of unpleasant experiences from others. The satisfaction of clients from health services has positive effects on their behaviors (32). In the adolescence period, friends and peers as a part of teenage identity were more important. Therefore, sharing the

unpleasant experiences of peers about receiving reproductive and sexual health services is one of the factors to hinder adolescents from accessing them (13). Poor interactions between parents and adolescents as one of the other barriers involve both the poor communication skills between parents and children and the parents' embarrassment to talk about reproductive and sexual health services with adolescents (26, 28). Another study deliberated the parents' prohibiting youth from receiving services as constructive to adolescent access to reproductive and sexual health services (13). Socio-cultural taboos in providing sexual and reproductive services for teenagers is one of the crucial socio-cultural barriers. Due to a fear of being judged by others, adolescents often conceal their reproductive and sexual health problems, these issues are commonly disregarded by their parents (26). Another barrier against adolescent access was the situation of their schools. After the family, the school is the first social environment that can significantly affect the health of the adolescent (29). Also, different schools use disparate methods to train and provide reproductive and sexual health services for adolescents, and there is no clear syllabus in this area (26).

3-4. Policy barriers

The most important policy barriers against adolescent access to sexual and reproductive health services include the lack of precise unanimity among policy-makers about the rights of adolescents' reproductive and sexual health (23), inappropriate management of the provided services and the absence of a proper index for evaluating it (32), poor coordination and cooperation between the Ministry of Health and other relevant organizations, for instance, the United Nations and Non-governmental organizations (NGOs) (28, 31), the shortage of government involvement and support (13, 21, 23, 28,

30, 31), the provided services not being comprehensive (29). Political obscurity about the rights of adolescents' reproductive and sexual health is a barrier against the youths' access to reproductive health services because there is no definite agreement among policy-makers and other law-makers about these rights; and, reproductive and sexual health services in Iran are generally neglected, as the preparation of them needs government approval (28).

4- DISCUSSION

The present study aimed to determine the barriers of adolescent access to reproductive and sexual health services conducted in Iran for the first time. The findings showed that barriers against adolescents' access to reproductive and sexual health services were categorized into four main classes: individual, structural, socio-cultural, and policy barriers. In the present study, the most important obstacle in view of adolescents was an individual barrier; while Geary et al. (2014) in their study with the aim of considering the obstacles and facilitators of adolescent access to reproductive and sexual health services in East Africa, expressed the most important barrier is structural barriers such as lack of human resources (33).

4-1. Individual barriers

Individual barriers comprise reluctance of adolescents to SRH educational content provided by these centers, the lack of adolescents' feeling of a need to provide reproductive and sexual health services, the lack of adolescents' skill and knowledge for the use of preventive reproductive and sexual health services, the negative attitude of the teenager towards reproductive and sexual services, the shame and embarrassment of teenagers for going and receiving reproductive and sexual health services, fear of stigma, fear of lack of

confidentiality, and the adolescents' economic situation. The reluctance of teenagers to SRH's educational content provided by these centers is one of the individual barriers. Frankly, when education is beloved for people and comprehended by trained people, it will be constructive. Also, during reproductive health education, it must be ensured that the content is understandable for people (34, 35). Other individual barriers were the lack of adolescents' skill and knowledge for using reproductive health services and the shame and embarrassment of teenagers for receiving the services. Although access to information about reproductive and sexual health is easy for teenagers, most of them do not have the knowledge and skills to use these services (26).

Also, adolescents did not come to the centers because of a fear of losing their dignity; because they felt embarrassment and shame (36). The findings of the study showed that the main reason that youths did not refer to health centers was fear of examination (49%), and embarrassment (47.8%) (36). In this study, according to the present studies, one of the important individual barriers was the fear of stigma and lack of confidentiality. Lindberg et al. (2006), and Hock-Long et al. (2003) expressed that adolescents fear of informing others about their referral to youth-friendly centers, the lack of confidentiality of information, their embarrassment and shame of expressing the sexual and reproductive health needs were the most important individual obstacles (37, 38).

In fact, fear of stigma is one of the main reasons for not talking about sex. In a study, adolescents' uttered adult behavior was the main reason of shame in talking about sexual issues. In their opinions, adults behave in a way that directly or indirectly prevents teens from talking about sex (30). The economic status of adolescents was another individual barrier.

Generally, among teenagers with low socioeconomic status, high-risk behaviors were higher. Subsequently, due to lower socioeconomic status, the possibility of accessing reproductive and sexual health services was lower. Additionally, although the family is the main source of financial support for teenagers, adolescents do not usually summon help from them due to shame and embarrassment (39).

4-2. Structural barriers

In the present study, structural barriers included the lack of appropriate training programs for adolescents, inappropriate location of centers and the lack of confidentiality of services, inappropriate time of service provision, inappropriate behavior of service providers and their ample responsibilities, inadequate budget for the establishment of these centers for the provision of reproductive and sexual health services to adolescents, lack of strategic planning for reproductive and sexual health of adolescents, inadequate qualified human resources to provide services and poor quality services. Britain et al. in a review study found the lack of confidentiality of services, the poor interaction of service providers, the lack of specialized training of them in this field, were important structural barriers (40).

The shortage of sufficient private space in these centers was one of the barriers. Bender and Fulbright said the lack of private space for counseling and the possibility of hearing conversations in the waiting room by others created concern for adolescents (17). Inappropriate time was one of the structural barriers. Abedian and Shah Hosseini showed that the clash of the work hours of these centers with the free times of adolescents, lack of time allocation to provide services for youths according to the various burdens of providers and the long waiting time for teenagers to receive these services were accounted as obstructions (13).

Ramezanzadeh et al., in their study aimed at considering the status of provider centers services to adolescents, stated that most of these centers provide services when adolescents and young people are at work or school. This inappropriate access, besides poor information, were the important factors in preventing adolescents from accessing these centers (41). Godia et al. found that the absence of full-time youth-friendly centers was considered as an important structural barrier (42). Akbari et al. (2013) reported the problematic access of villages to these centers was considered as structural barrier (unfair allocation of services) (28). Generally, rural areas were considered as high-risk areas for adolescents; additionally, adolescents living in villages and suburbs might have many barriers to accessing high-quality preventive health services (20). Unsuitable behavior of service providers was another structural barrier.

Garside et al., showed that the absence of support and attention of service providers toward teens' demands, judged by the service provider team and their disrespectful manner with adolescents were barriers to having access to these services (43). In the present study, Geary et al. (2014) concluded that the lack of trained personnel in the field of juveniles' reproductive and sexual health is an important barrier (33). Akbari et al. (2013) explained that the shortage of trained and qualified staff was an essential challenge in improving access to reproductive health services. In spite of the public access to primary health care in Iran, there is a lack of the specialized workforce in the education field of juveniles' reproductive and sexual health (28).

4-3. Socio-Cultural Barriers

In the present study, the socio-cultural barriers included a variety of individual views about the provision of reproductive and sexual health services for teenagers,

religious leaders' attitudes toward providing reproductive and sexual health services for adolescents, emulating non-Islamic patterns in training and providing services to adolescents, community attitudes about reproductive and sexual health services for adolescents, negative attitudes of services providers towards provision of reproductive and sexual health services for youths, the transfer of unpleasant experiences of others from receiving sexual and reproductive health services to youths, peer pressure about not receiving reproductive and sexual health services due to undesirable experiences or other reasons, poor interactions between parents and adolescents, the existence of social-cultural taboos in the provision of sexual and reproductive health services for adolescents, the situation of schools, the absence of community's knowledge about the location where reproductive and sexual health services could be provided for this group, the gap between norms and social behaviors, and social concerns about the negative impact of sexual education on adolescents.

According to our study, religious leaders' attitude towards the provision of these services was one of the most important social-cultural barriers, which, based on the most studies, is negative (13, 21, 28, 30); however, Shariati et al. (2014) in their study found that not only is the religious leaders' attitude not negative in this field, but the religious potential is not being applied in strategic planning for providing these services could be accounted as an obstruction (31). Religion has no conflicts with sexual education to adolescents, and religious leaders are in agreement with sexual education (44). In Iran, religion plays a key and inseparable role in the cultural and social life of individuals. It is a must that the Ministry of Health and Medical Education of Iran through supporting expert clergymen develop a program to train adolescents about the

reproductive and sexual health, based on religious values, and thereby permit youth-friendly services to be supported. Applying non-Islamic patterns to provide reproductive and sexual health services to adolescents is one of the main causes of religious and cultural resistance to these services. According to religious leaders and authorities, Muslims should design these services based on indigenous, cultural and religious patterns. As an emulation of Western models would lead to the refusal of reproductive and sexual health services (30). Another social barrier against adolescents' access to these services was the transference of unpleasant experiences from others. At present, the viewpoint of clients towards health centers is assessed as one of the important components of the quality of health services (45). The emphasis on the clients' satisfaction from health services is because of the positive effects that affect their behavior and others. This leads to health services being frequently used, the instructions and provided teachings being correctly applied by them and suggested to others. The importance of patient satisfaction becomes more when it becomes noticeable for us that dissatisfied clients will result in rejection of a greater number of clients than those who are satisfied (46, 47).

In our study, one of the important social barriers was poor interactions between parents and adolescents, both the poor communication skills between parents and children and the parents' embarrassment to talk about reproductive and sexual health services with adolescents (26, 28). The family ban is one of the most important social-cultural barriers in developing countries (48). In these societies, education about some issues, for instance, sexual and reproductive health is accounted as a taboo and strategies should be considered to identify these obstacles and demolish them. Another barrier against adolescent

access to reproductive and sexual health services was the situation of their schools. After the family, the school is the first social environment that can significantly affect teenager health. The school environment, lighting, amenities, safety, interaction with teachers, counselors can have an impression on the teenager's health dimensions (29). In different schools, diverse approaches are used to train youths about reproductive and sexual health services, and there is no unique educational syllabus about these issues (26).

4-4. Policy barriers

In the present study, policy barriers included: the lack of precise unanimity among policy-makers about the rights of adolescents' reproductive and sexual health, inappropriate management of the provided services and the absence of a proper index for evaluating it, poor coordination and cooperation between the Ministry of Health and other relevant organizations, and the lack of government's involvement and support. In a study, key informants such as academics and non-governmental organizations' delegates state that the political atmosphere about youths' reproductive and sexual health issue is negative in Iran. Even the definition of teen's rights and the types of services that should be available to them is vague. Many policy-makers do not consent to sexual education and teenage access to reproductive health services (23). Another policy barrier in our study was unsuitable service management. One of the main factors in the growth of advanced societies and the exclusive element of each organization is its management. Alongside providing financial resources, management based on pondered opinions about the conditions and problems that exist in juveniles reproductive and sexual health services and identifying indicators and goals for promotion programs of adolescents

reproductive health are crucial and decisive (32). Policymakers believe that implementation of a youth-friendly service will be more effective and endurable through cross-offices support. Likewise, this program needs the constant collaboration of the health team (such as a doctor and midwife) related to adolescent health and proper financial and human resources support, without them, the fulfillment of this plan is not possible (23). So, an effort to improve the achievement of services of "Reproductive and Sexual Health for All" needs to challenge barriers at all levels of the individual, family, and community, government, health service system, government agencies, as well as coordination and cooperation of cross-offices and International and non-governmental organizations (28).

Fathalla et al., believed that global access to reproductive and sexual health services is an achievable purpose, but it needs to have an appropriate environment for implementation of proper and effective programs, political will to be accomplished at the national and international levels (49). So, in order to increase the access of teenagers to these services, it is a must to publicize the reproductive and sexual rights of adolescents, officially via the media and through attracting the support and participation of religious leaders to reduce social taboos, and familiarize community with adolescents' health needs. It also seems that the constitution of mobile youth-friendly centers in rural and suburb areas is an impressive step towards promoting the social equality. The powerful point of this study was the results of all types of quantitative and qualitative studies were considered. It is suggested that other studies be conducted to contemplate and determine the portion of each barrier in accessing services which can be constructive to allocate funds to eliminate them, respectively.

5- CONCLUSIONS

In the present study, barriers against adolescent's access to reproductive and sexual health services were categorized into four main groups comprising individual, structural, socio-cultural barriers, and policy barriers. Since the development of adolescents needs for all societies is crucial, we can enhance the access of adolescents to adolescent health services by identifying these barriers and removing them. The results of this systematic review study are useful for legislation, planning and designing strategies for removing obstacles against adolescent access to reproductive and sexual health services; and, they could be used to govern the existing challenges in accessing adolescent reproductive and sexual health services based on culture and the current situation.

6- CONFLICT OF INTEREST: None.

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Table-2: Information about reviewed Qualitative articles related to adolescent's barriers to reproductive and sexual health services in Iran.

Reference	Author, Year	Title	Type of study	The location of the study	Sample trait and sampling method	Main result	JBI-QARI The total score of quality assessment (25)
(32)	Shah Hosseini et al. (2011)	Determining the structure of reproductive health services for teenage girls: Qualitative Research	Qualitative	Sari	67 teenage girls by FGD method and 11 interviews with key informants	The main findings included public services, specific services, reinforcing the facilitating factors of services reception, removal of deterrent factors in services reception and delightful service management, which showed the participants' experiences in relation to the structure of reproductive health services for adolescents.	7
(28)	Akbari et al. (2013)	Accelerators/decelerators of achieving universal access to sexual and reproductive health services: a case study of the Iranian health system	Qualitative	Tehran	55 deep interviews with key informants and 6 interviews in FGD method	Barriers against access to sexual and reproductive health services were classified in both national and international levels. At the international levels, the negative attitude of clergymen to providing these services and the lack of international funding for providing these services were major obstacles. At the national levels, government and community play a barrier role, interchangeably.	9
(26)	Keramat et al. (2013)	Barriers to youths' use of reproductive health services in Iran	Qualitative	Shahrood	Sampling-based on aim and maximum diversity; 38 teenage girls and boys by the FGD method	The most important obstacles against adolescents' access to reproductive health services in adolescents are categorized into the four main groups: individual barriers, cultural barriers, organizational causes, and parental interference.	7

(27)	Mousavi et al. (2013)	Barriers to youths' use of reproductive health services in Iran	Qualitative	Tehran, Mashhad, Shahrood, and Qom	318 teenagers and key informants by deep and FGD Interview methods	According to the research findings, there are six main reasons for the necessity of provision of SRH services for adolescent girls: lack of sufficient information about SRH, easy access to inaccurate information sources, cultural and social changes, increased high-risk behaviors in adolescents, religious emphasis on sexual education for children and teenagers and existence of cultural taboos.	7
(23)	Ramezankhani et al. (2014)	Barriers of the Health Sector of Iran in response to sexual and reproductive needs of young people: Perspectives from key informants	Qualitative	Tehran	54 deep interviews with key informants and 6 FGD Interview methods	The identified barriers by key informants in the health care system included: political obscurity about reproductive rights, ineffective and unworkable programs, unqualified human resources, and poor cooperation and coordination among key informants.	8
(31)	Shariati et al. (2014)	Iranian adolescent girls' barriers to accessing sexual and reproductive health information and services: a qualitative study	Qualitative	Tehran, Mashhad, Shahrood, and Qom	Semi-structured interview with 247 teenage girls and 71 key informants	The main obstacles against access to these services are classified into four categories: (1) social and cultural barriers, such as taboo; (2) official and structural barriers, such as the inappropriate structure of the health system; (3) political barriers, such as the lack of appropriate governmental strategies and 4) not using religious potential.	8
(30)	Latif Nejad Roudsari et al. (2014)	Socio-cultural challenges to sexual health education for female adolescents in Iran	Qualitative	Mashhad Ahvaz	13 interviews with teenage girls, one FGD and 5 interviews with key informants	The results showed that the main socio-cultural challenges in juveniles' sexual health education in Iran are influenced by taboos related to gender (such as the prohibition of premarital sex, social concern about the negative effects of sexual education and so on).	9
(29)	Azh et al. (2017)	Adolescents confusion in receiving health services: A qualitative study	Qualitative	Tehran	65 adolescents aged 15 to 18, 9 young people aged 19 to 24, and 19 key informants by interview and FGD method	The results showed that the reasons leading to adolescent refusal to access services included: health concerns, inappropriate behavior of community, and the weakness of health services systems in responding to adolescent needs.	10

FGD: Focused Group Discussion; JBI-QARI: Joanna Briggs Institute Qualitative Assessment and Review Instrument.

Table-3: Information about reviewed quantitative articles related to adolescent's barriers to reproductive and sexual health services in Iran.

Reference	The name of author and year of release	Title	Type of study	The location of the study	Sample trait and sampling method	Main result	Newcastle/Ottawa Scale The total score of quality assessment (24)
(13)	Abedian and Shah Hoseini (2014)	University students' point of views to facilitators and barriers to sexual and reproductive health services	Cross-sectional	Sari	547 students by questionnaire method	The barriers of sexual health services comprised "participation of youths in sexual and reproductive health services" and "fear of stigma", respectively.	6
(21)	Abedian and Shah Hoseini (2015)	Barriers to health education in adolescents: health care providers' perspectives compared to high school adolescents	Cross-sectional	Sari	402 high school students and 72 service providers by questionnaire method	The main obstruction against health education for adolescents from the viewpoint of health care providers was the "lack of a private room for training adolescents health", while the main obstacle from the viewpoint of adolescents was "the lack of teens' interest in the content of educational programs."	6