DOI: 10.7860/JCDR/2017/23393.9761

Original Article

Community Medicine Section

Adolescents Confusion in Receiving Health Services: A Qualitative Study

NEZAL AZH[1], FATEMEH NAHIDI[2], GITI OZGOLI[3], GELAYOL ARDALAN[4]

ABSTRACT

Introduction: Providing health services for adolescents requires exploration of hidden factors from the perspective of adolescents, providers, and key individuals. Understanding the process of providing health services from adolescents point of view will help receiving and continuation of services. Although many studies have been conducted in Iran on adolescents health needs, few studies have dealt with provision of these services to adolescents.

Aim: The present study aimed to explain the adolescents and key informants' perception of healthcare provision.

Materials and Methods: The present qualitative study was conducted according to grounded theory. Data were collected using deep semi-structured individual interviews and group discussion. Participants were selected through purposive sampling followed by theoretical sampling. Participants in present study were 65 adolescents, nine youths (19-24-year-old), and 19 parents and key people involved in providing health services. Adolescents and their parents were selected from different parts of Tehran. Data collection continued until data saturation, and was analysed using Corbin-Strauss (2008) method.

Results: Issues relating to adolescents perception of the process of providing services included health concerns, society's inappropriate behaviours, and weakness of the health services system in responding to adolescents needs, which as underlying factors contributed to adolescents confusion in receiving services and their proper coping with puberty.

Conclusion: Due to lack of education on how to manage puberty by parents, schools, society, and the health system, participating adolescents from Tehran were confused about receiving information and unable to manage puberty problems. Solving this problem requires continuity of services and interaction of family, school and community.

Keywords: Adolescent's health, Developing country, Grounded theory, Health care systems

INTRODUCTION

Adolescence is a period of life with special health, developmental, and legal needs. Although mortality rate in this age group is less than other groups, 1.3 million deaths occurred in this group in 2012; the most common causes included traffic accidents, HIV infection, suicide, respiratory infections and violence [1]. The growing trend of drug abuse [2] and alcohol use among adolescents may result in the risk of illegal behaviours [3]. Iran is a country where high prevalence of high-risk behaviours were reported [4].

Services are provided to adolescents in the world and in Iran according to the above issues, understanding and subsequently responding their particular needs. The International Conference on Population and Development (ICPD) (1994) and its subsequent practical programs titled "Youth Friendly Services" was held to the same effect [5]. The World Health Organization (WHO) in adolescents health report (2014), declared supporting adolescents health as one of the ten key functions of the health sector and an equity index, and emphasized investment in research into adolescents health as a priority [1]. Youth Friendly Services has different priority patterns depending on the needs of different communities. Youth friendly and long-acting reversible contraceptive services in US [6] spreading use of condoms and self-restraint education in Africa and low income countries [7,8]. Establishment of the National Mental Health in Schools in Australia [9,10] and Canada [11] are some of these services. Providing the right services to adolescents is also one of the concerns of policy makers in Iran, which has been highlighted in clause 15 of the 20-year development vision document [12].

Accordingly, in collaboration with WHO, UNICEF and UNFPA, Iran established 16 Youth friendly centers [13]. Furthermore, health-promoting schools began their work in 2003-2004 by Iran's Ministries of Education and Health, currently integrated adolescents health programs are carried out in health centers [14].

Despite various services being provided across the world, only a small percentage of adolescents use these services [15-17]. In Iran, providing services to adolescents suggest failure in this matter. There is no sexual and reproductive health education in schools to prevent serious risks such as unwanted sexual relationships, STD's, pregnancies, and illegal abortions [18,19]. Due to management changes and lack of funding caused by economic problems and sanctions, implementation of health-promoting programs for all age groups is faced with problems and dissatisfaction [20].

According to adolescents health needs [21] and current changes in the society, technological advances and use of the internet [22] beget the following questions: what factors limit or encourage receiving health services, and where, how and by whom these services are provided. Generally, assessment of adolescents perception of health services is a necessity for providing services to this age group. Although, many studies have been conducted on this subject in other countries, the subject has not yet been studied in Iran. The present study was conducted to explore perception of adolescent towards healthcare provision in the present Iranian society.

MATERIALS AND METHODS

Approach

The present qualitative study uses grounded theory approach. Grounded theory is considered as beneficial for exploring hidden factors of adolescents perception of the process of providing health services because it provides the opportunity for assessment and interpretation of data, extraction of meaning, and understanding and development of empirical knowledge needed in the development of a theory [23].

Sample Recruitment

The present study was conducted among boys and girls schools of Iran University of Medical Sciences, Tehran University of Medical Sciences, Municipality Cultural Centers and the Ministry of Education in Tehran. In this study we used purposeful sampling with maximum of diversity approach. Volunteer's adolescents in family and school from different districts of Tehran were invited to participate. Sampling was done gradually and continuously. Initial concepts and categories were guidance for the process of theoretical and integration of categories. Parents, teachers, managers and consultants of schools and other people who are involved in providing health services such as managers of education and health ministries, health providers gradually entered to study. Sampling was continued to richness of data. Participants in present study were 65 adolescents, nine youths (19-24-year-old), and 19 parents and key people involved in providing health services who were participated in nine group discussions and 30 individual interviews [Table/Fig-1].

Participants	Number	Type of interview	Education level
15-18-old-year	65	9 focus discussion groups 2 individuals	students of high schools
19-24-old-year	9	9 individuals	students of university
Parents	2	2 Individual	BS
Officials in the Ministry of Health	6	6 Individual	Specialist and Ph.D.
Officials in the Ministry of Education	8	8 Individual	MA. PHD
municipality cultural centers	3	3 Individual	BS.MA

[Table/Fig-1]: Demographic characteristics of participants.

Data Collection

Interviews were conducted in schools or participants workplace. Data was collected by researcher who works as a teacher and their trained young colleagues. We used unstructured in-depth interviews, lasting between 20 minutes in case of individual interviews and 120 minutes in focused group discussions, members of the group discussions were 6-9 students. All interviews and group discussion were conducted with the permission of school authorities, voluntarily participated in the study. Focused group discussion was performed in one class of student's schools. Interviews were mainly focusing on people's experiences of receiving health services, for example the first question after introducing was: would you talk about your next experiences of visiting health center.

Further open questions were asked according to participants answers. All interviews were recorded. Immediately, it was transcribed and analysed. According to results of previous interviews, questions were prepared for the next interviews. Collection of data continued until data saturation.

Ethical Considerations

The present study was approved by the Ethics Committee of Shahid Beheshti University of Medical Sciences, Tehran, India (Ethics Code: IR.SBMU.RETECH.2016.177). Informed written consents were obtained from all participants or their school authorities prior to interviews and audio records. Interviewees were assured of withdrawal at any time they wished. All audio records were stored anonymously.

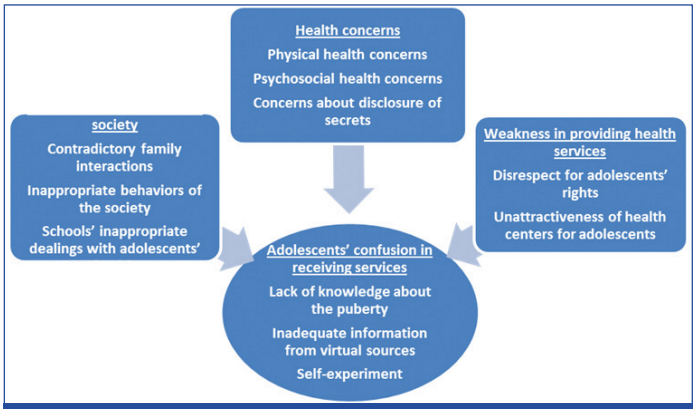
Data Analysis

In this study, we used Corbin-Strauss grounded (2008) approach in which analysis and collection of data were carried out simultaneously [23]. Soon after each interview, the record was transcribed and written in word. Field notes were attached to it immediately and a code was given to the same audio files. Then, after reading it several times, the line was drawn under the important subject and the initial codes were emerged. Initial coding was done manually, and then entered the Microsoft Access and the data was compared continually. After analysis the background, process and outcome, the data was categorised and subcategorised for ease of analysis. Rigour and quality of data was assessed using 10 Corbin-Strauss criteria, of which the most important points were as follows: Data collection took one year that reflected the long-term interaction with data, field notes and reminders after the transcript of each interview was written in the discussion and design main concept. To collect data, teenagers of various ages and young people who were involved in health care delivery were invited, so that sampling can be carried out with maximum diversity. Individual interview and focus group discussion with filed observation were used. Approval on findings was obtained from two experts from the department of Adolescents of the Ministry of Health and Education, three participants from study and 2 non-participants. The logical flow of ideas was achieved through detailed progress report of the study process to external checks.

RESULTS

A total of nine focus group discussions and 30 individual interviews were conducted with adolescents, young people, and official and employees of the Ministry of Health and Education. Details of interviewees are presented in [Table/Fig-1].

Adolescents feel concerned about their own health following physical changes in themselves and psychological changes in peers. As causal conditions, health concerns lead to curiosity about causes of these changes and search for answers in the family, and among friends, teachers and school counselors. However, conflicting reactions of the society are unable to obviate this problem, and adolescents seek answers from health centers that have their own plans for providing services. But the search is fruitless due to the system's interest in treatment and weakness in providing services which lead to further confusion among adolescents in receiving services they need to manage changes of puberty. This process indicates failure of the society and health service system in responding to particular needs of adolescents [Table/Fig-2]. Discussion about central issues is presented below.



[Table/Fig-2]: Main categories in "Adolescents confusion in receiving health services".

1. Health concerns and start of curiosity

As causal conditions, health concerns caused by sudden changes of puberty were the root of adolescents curiosity. These concerns were associated with physical and psychological changes and mental transformations, emphasizing psychosocial dimension of sexual maturity. Sensitivity to physical changes, fitness, beautiful appearance, interest in cosmetic facial surgery, attention to orthopedic problems such as correct walking, dentures and maxillofacial matters, delayed menarche or telarche, excessive tallness or shortness, uneven limbs, acne, obesity or thinness were

all among concerns cited by adolescents during interviews. This category is the result of concerns about physical and psychological health and concerns about disclosure of secrets.

A. Physical health concerns: These concerns pertain to physical matters, such as growing tall and facial hair in boys, and enlargement of breasts and menstruation (whose presence or absence worried them) in girls. Failure to understand these changes and sudden exposure to them was referred to by adolescents as indigestible. One of the participants explained;

"*I was all mixed up at first. My height suddenly grew and I developed beard and mustache. It was hard to digest. I was only a happy kid without facial hairs. Well, changes happen. I felt I was grown up now, and that was it (15-year-old boy, interview 1)*".

B. Psychosocial health concerns: These concerns include psychological changes such as introversion, which was rapid mood swings from depression to euphoria and anxiety, alternately experienced by participants. Difficulty in connecting with people and society was another concern cited by adolescents.

"*I have a terrible stress problem. I am ready to be hanged, but not experience that stress (16-year-old girl, F5*)".

C. Concerns about disclosure of secrets: Participants emphasized on importance of their privacy and were concerned about disclosure of their secrets.

"*You cannot trust counselors these days, be it in school or outside, because everything you say (emotional and psychological) will be reported to your parents (16-year-old girl, F2)*".

2. Conflicting reactions of the society: Ineffective answers to adolescents curiosity

Adolescents are curious and seek answers from family, school and society (the three important factors affecting their health). The effect of family and complete dependence of adolescents on parents is in conflict with their sense of autonomy. The socioeconomic status, and certain rule and customs in the society such as greater attention to boys, restriction of girls and limitations imposed on education of married girls were pointed out by participants, which lead to discrimination in receiving services. This code is the result of the following three items:

A. Contradictory family interactions: Participants believed contradictions in family interactions to be caused by the dual role adolescent dependence on parents on the one hand and inappropriate dealing of parents with the issues of puberty and sensitive sexual relations in this period, which occasionally created a communication barrier between them and their parents. Boys blamed this on generation gap, and girls regarded it as sexual discrimination. They argue that their parents belong to the war generation and its subsequent economic problems, and they have experienced this period differently. These behaviours ranged from no communication to proper adolescent-family communication.

"*My mother and I don't get along at all. I cannot discuss my problems with her. She doesn't respect me. We don't even talk right now" (16-year-old girl, F2)*.

"*My parents belong to the 1970s. They cannot understand us (15-year-old boy, interview 1)*".

B. Inappropriate behaviours of the society: The ruling socioeconomic conditions are due to financial and social problems, some families are unable to properly raise their children, and force them to sell porn movies and photos and even drugs as a source of family income. Moreover, some of the behaviours are accepted norm in the society: issues like sexual discrimination and inappropriate customs, and non-acceptance of young married girls by day schools, which can have adverse implications for the girl and her family. In this respect, two participants commented:

"*My brother describes everything for my mom when he gets home. She is my mom, too. But my brother reveals everything to my mom, and my mom doesn't even shrug a shoulder. Why are boys so free? (17-year-old girl, F6)*".

"*A married girl has to go to night school and be an academic failure, and then leave school altogether. She has to stay at home and turn into a mother with no knowledge, and the same is transmitted through her family, and her kids will have no knowledge either (16-year-old girl, F1)*".

C. Schools inappropriate dealings with adolescents health: After family, school is the first social medium that can significantly affect the health. The atmosphere, lighting, facilities, safety, interaction with teachers, counselors, and school officials can all affect adolescents psychology and every dimension of his/her health. Participants complained about school authorities failure to attend to adolescents mental health. Two of the participants argued:

"*Money is all they want, schools invite us (parents), but don't teach us what to do (52-year-old father)*".

"*And they ask us why you scored so poorly. Just look at this classroom. It has one barred window that is locked, and the walls are purple. Enough to send you to sleep, or make you depressed. They never considered us when painting these walls (18-year-old girl, F7)*".

Participating adolescents and their parents rated counseling and school counselors so negatively that eliminated them from providing services. A participant explained:

"There is no specific place for counseling in the school. Only a room that is shared by two other counselors and the filing system. Perhaps you wouldn't want others to hear what you have to say (15-year-old girl, F1)".

3. Weakness in providing health services

Once disappointed with family and friends, to find explanation about puberty changes, adolescents turn to health centers and private clinics with populist excuses. Poor provision of services induced the view that these centers are not much able to provide services needed by adolescents. This code has the following two items:

A. Disrespect for adolescents rights: Adolescents have rights and expectations from health centers that are overlooked by providers. This is caused by improper provision of services and negative attributes of providers in public centers, which leads to negative attitude toward public services. One of the participants argued:

"*They should tell us about medication side-effects. It would be good if we also had information on disease complications. But it's not so. (15-year-old girl, F4)"*.

"*The doctor sees ten people at the same time in his clinic, and simply asks a question and writes a prescription (18-year-old girl, group discussion 7)*".

"*Paper chase; that's all they do; they pass you back and forth so many times until you get fed up with every hospital there (18-year-old girl, F5)*".

Adolescents referred to contradictions in providing services. They believed that health services are trending toward privatized and unnecessary services. Some considered this as a good result and some as bad. Two of the participants commented;

"*Doctors don't have time for their patients, but they are quick to show you models for a nose job … (17-year-old girl, F6)".*

"Every time I went to my doctor's private clinic, he would spend time and explain everything beautifully. But the same doctor in a public hospital wouldn't talk or ask any questions, and just spends a minute to write some tests this time, or CT scan the next time (18-year-old girl, F8)".

Adolescent students who had been sent by their school to complete their health certificates faced problems. The small number of care

providers and huge workload had led to poor quality services. Two adolescents commented:

"*They had mixed up our appointments and ran out of time and got tired and rowdy (15-year-old girl, F4)*".

"*Doctors there didn't fully examine us ……. For instance, the doctor asked me if I wore glasses during eye examination, and I said yes, so he said that I should have a proper eye examination elsewhere (15-year-old girl, F 4)*".

While agreeing with students, school health service providers blamed the situation on headquarter official, poor state of health centers and lack of proper management. Two of the participants explained:

"*The whole workload is on the family health team, with no funding …… how much can we do? Problems arise, and we get exhausted, and that affects quality of services. Old people, middle-aged people, SEMA project, Saba project, we cannot deal with them all ……. (Family health expert, interview 21)*".

"…. I dare say that students' national code and number of lice cases are more important for them (headquarter inspectors) than treatment and causes of diseases (family health expert, interview 28)".

B. Unattractiveness of health centers for adolescents: Participating adolescents believed that because of their dubiousness and the need to have parents' and school's permission and also unavailability in terms of location and time, special adolescent centers were not appropriate for receiving health services. Furthermore, the existing health centers rather emphasize physical illness, where adolescents consider themselves healthy. Two participants commented:

"*We have to take permission from our mothers to go to these centers, don't we? Would it not be better if these centers were in schools or by schools, so our parents would allow us to go … (16-year-old girl, F1)*".

"*To receive training or a service, I have to make several kilometers trip on the bus or subway, and hear things. Well no one in their right mind would do that. There should be enough of these centers to make them more accessible, which is not cost-effective (15-year-old boy, interview 1)*".

4. Adolescents confusion in receiving services

Concerned about changes, adolescents seek explanations from their families, society, school, and the health system, and they end up in confusion about how to receive services they need to deal with their puberty problems. Adolescents are unable to ask questions or hear answers from parents, relatives or the health system, and thus they face a crisis which is caused by lack of knowledge about puberty and the need to experiment as the outcome of this lack of information, which exposes them to risks.

A. Lack of knowledge about the process of puberty: Adolescents lack of knowledge is due to lack of teaching by family and school and lack of proper information resources. Sometimes through ignorance, and sometimes through abstinence, families and school officials refuse to teach adolescents. Two of the participants argued:

"*Parents don't know or don't want to know that their kids need information about sexual maturity (19-year-old boy, interview 8)".*

"Our teacher was always reluctant to talk about issues of puberty and reproductive system. She feared kids would report her to the headmaster and families (15-year-old girl, F6)".

B. Inadequate information from virtual sources: Virtual methods are the most commonly used sources. Not knowing the right internet sites and using advertising and provocative site, ambiguity of information received, all contribute to the confusion. Comments from two participants read:

"*The information from the internet is incomplete, and occasionally wrong. I think that's not enough (15-year-old girl, F1)".*

"Kids experience alcohol use and sexual relationships according to what they read on the net (22-year-old girl, interview 28)".

C. Self-experiment: Because of their physical, mental, hormonal conditions and sexual desires, adolescents desperately need educational services on puberty. Lack of access to information, desire to relate to the opposite sex, peer pressure, and parents and schools not knowing what to do, in an impoverished area pushes adolescents toward self-experiment, which threatens their health. Quotes from three participants read:

"*When you don't have the right information about something, you tend to experiment yourself, and obtain information in this way (23-year-old girl, interview 2)"*

"If you are allowed to walk on the street with your girlfriend, without having to show ID cards [to prove you are married], or check to see when her mother goes to the hairdressers, so he can invite the girl home. Well anything can happen then, including that (sex) (21-year-old boy, interview 3)".

"Cigarette, alcohol, shisha, girlfriend or boyfriend are now the norm. It's no longer about fooling girls. There are very few girls that have not experienced sex … (family health expert, interview 28)".

The present study data suggest that the fading role of family, teachers, school counselors, and the elders in puberty education is a serious threat to adolescents health.

DISCUSSION

In the present qualitative study, grounded theory approach was used to investigate adolescents perception of healthcare service provision. This study found that important health needs of adolescents were information about puberty and subsequent physical, psychological and mental changes, and dealing with society. For these, adolescents turn to parents, school officials, friends, virtual sites and the health system, and ultimately consider self-experiment as the last option for understanding these changes. The central theme in this process was adolescents confusion about receiving health services, which had a direct relationship with three other themes [Table/Fig-2].

Health Concerns: In the present study, health concerns were the underlying theme, and provoked adolescents to receive health services. Their concerns about physical changes, sexual puberty, psychological and personality transformations emphasized psychosocial dimension. Although adolescents trivialized physical problems; they stressed on aesthetic beauty or abnormality of their body. This point is also suggested by other authors such as Berk [24] and WHO [1].

Social Concern: In relation to social contradictions as the second main category, the present study showed contradictory reactions to puberty. Three subcategories were emeged. First were contradictions of family. Adolescents wanted greater freedom and they didn't like their parents nagging them. Results were similar to the studies conducted by Ying and Deb that adolescents demand greater independence in the third stage of adolescence, and families that excessively control their children will fail in developing their personality, and cause them to react negatively [25,26].

Participants wished their parents could provide answers to their questions, but they talked about barriers (shame, parents unaware). They believed the social, political, and economic conditions (war, followed by economic sanctions experienced by previous generation) and access to the internet have created a highly tense environment in which previous generation is denied of the opportunity to think about sexual matters and puberty, thus parents ignored their adolescents needs. Poor literacy of parents increased health risks and likelihood of high-risk behaviours in adolescents [27,28].

Second issue cited in this theme was wrong social norms that directly and indirectly have affected adolescents health. For example young girls are encouraged to have early marriage. This, along with reduced age of puberty, and socioeconomic crisis, followed by their dismissal from day schools and ultimately leaving school, and continuation of the vicious cycle of illiteracy and early marriage. These issues were reported by WHO [29]. Other inappropriate social norms were improper resources of information such as internet, satellite and unaware friends. Also the effect of use of this method is emphasized in some studies [30]. But in present study, they were concerned about it. The present study revealed the need for fundamental changes in culture and norms of the society, which requires several interventions at high levels of policy-making.

Third issue of this category was inappropriate school methods. Adolescents insisted that information about puberty, mental and sexual health should be provided by teachers and school officials. Other studies have also emphasized effectiveness of school interventions in reducing high-risk behaviours such as use of alcohol, violence, and high-risk sexual behaviours [31]. But schools inability to respond to adolescents confusion was other findings in the present study. They believed that school officials main focus is on academic achievement and university acceptance rate. Use of academic advisors, elimination of exercise period in some schools, and inappropriate environment and absence of parent-school interaction has caused anxiety in them. Excessive emphasis on academic achievement has created academic stress, which emerges in the form of depression, anxiety, behavioural problems, poor well-being, and poor academic scores, which has been demonstrated in previous studies [32,33].

Weakness of Health System: Latest main category was weakness of health system. Health service providing system could have been another source for responding to ambiguities of puberty for adolescents. The current system have programs for providing these services to adolescent group, but in the opinion of participants, lack of health service providers motivation, mismanagement in these centers, financial problems, rapid management changes, and lack of support and coordination among managers in health ministries and offices lead to failure of these programs. Studies conducted by Akbari and Javadnoori on policies relating to provision of reproductive health services are valuable studies [18,19], in which Akbari refers to the correction of reproductive health management chart, and Javadnoori emphasizes the role of politicians in sex education as a necessity. The dissatisfaction of providers which may be due to vulnerability of these job holders [34] may be related to the providers huge workload.

Lack of knowledge of care providers including doctors and nurses in caring for adolescents was another issue raised in the present study, which was also confirmed in a study conducted in Saudi Arabia, where doctors had little information about specific needs of adolescents [35]. This shows the need for training the care providers in areas relating to adolescents.

Financial problems in developing countries [36], especially in a sanctioned, single commodity country like Iran, compounded by absence of a coherent program for the assessment and prediction of problems and prevention of failures has led to low quality levels of provision of services. Thus WHO has emphasized on a quality data evaluation system [1].

Participants in the present study complained about late provision of information, which had made them turn to other sources and self-experiment to find information. This is confirmed in a study conducted by Reeves et al., in England, who argued that information relating to sexual relationships should be made available to adolescents at a younger age, since 45% of 15-16-year-old adolescents had already experienced sex [37].

In short, because of lack of information and improper resources, adolescents are confused about dealing with puberty problems. Then it may lead to trend of high-risk behaviours, which is also referred to in the National Caspian study 4 [4].

LIMITATION

This study has some limitations that must be acknowledged. Adolescents in this study were from one city in Iran, so the result can not be generalised and study need to be conducted on larger sample size.

CONCLUSION

The present study results showed that adolescents perception of the process of health service provision is the outcome of the rapid physical, psychological and spiritual changes induced by puberty as the causal condition, and their curios yet mystical view of this process. To find out about causes, they turn to parents and family, friends, school teachers and counselors and internet sites. Disappointed with the information they receive, on the precept of physical problems (real and unreal) they visit health centers or private clinics and psychologists. Along the way, some manage to obtain information they need, and others due to weaknesses of these systems and lack of information on management of puberty problems, are steered to self-experimentation and risks of this period. Whatever model is used for the provision of health services in our society, it should include participation and education of families and schools, support of NGOs, and modified determinants of health such as socioeconomic status, so as to lead to necessary puberty education and empowerment of adolescents for a healthy future life. This requires reformed management system ruling health centers, preference of health over treatment, education of health service providers in the subject of adolescents, a quality data assessment system, and collaboration with other organizations.

REFERENCES

[1] Health for the world's adolescents a second chance in the second decade. Available from: http://www.who.int/maternal_child_adolescent/topics/adolescence/second-decade/en/ [Accessed 2014].

[2] Health in 2015: from MDGs to SDGs. Available from: www.who.int/gho/publications/mdgs-sdgs/en/.[Accessed 2015].

[3] Cheever A, Weiss J. Alcohol use among adolescents. California Journal of Health Promotion. 2009;7(1):86-98.

[4] Kelishadi R, Ardalan G, Qorbani M, Ataie-Jafari A, Bahreynian M, Taslimi M, et al. Methodology and early findings of the fourth survey of childhood and adolescence surveillance and prevention of adult non-communicable disease in Iran: The CASPIAN IV study. International Journal of Preventive Medicine. 2013;4(12):1451-60.

[5] Tylee A, Dagmar M, Graham T, Churchill R, Sanci LA. Youth-friendly primary-care services: how are we doing and what more needs to be done? Lancet. 2007;369(9572):1565-73.

[6] Kavanaugh ML, Jerman J, Ethier K, Moskosky S. Meeting the contraceptive needs of teens and young adults: youth-friendly and long-acting reversible contraceptive services in U.S. family planning facilities. J Adolesc Health. 2013;52(3):284-92.

[7] Gottschalk LB, Ortayli N. Interventions to improve adolescents' contraceptive behaviours in low- and middle-income countries: a review of the evidence base. Contraception. 2014;90(3):211-25.

[8] Brieger WR, Delano GE, Lane CG, Oladepo O, Oyediran KA. West African youth initiative: outcome of a reproductive health education program. Journal of Adolescent Health. 2001;29(6):436-46.

[9] Horsfield E, Kelly F, Clark T, Sheridan J. How youth-friendly are pharmacies in New Zealand? Surveying aspects of accessibility and the pharmacy environment using a youth participatory approach. Research in Social and Administrative Pharmacy. 2014;10:529-38.

[10] Booth ML, Bernard D, Quine S, Kang MS, Usherwood T, Alperstein G, et al. Access to health care among Australian adolescents young people's perspectives and their sociodemographic distribution. Journal of Adolescent Health. 2004;34(1):97-103.

[11] Anderson j, Lowen C. Commentary developing youth-friendly family practice. Canadian Family Physician. 2010;56(8):737-38.

[12] The 20-Year National Vision of the Islamic Republic of Iran for the dawn of the Solar Calendar Year 1404 [2025 C.E.]; 2015. Available from: http://irandataportal.syr.edu/20-year-national-vision.

[13] Unicef. Youth friendly in Islamic Republic of Iran, Iran: Unicef; 2009. Available from: www.who. Unicef.org.

[14] Motlaghm MA, Ziaadini H, Dashti M, Aghli M, Ardalan G. Health promotion school(hps) guidline. 1389 5 d/3405; Ghom. Ghom: khademalreza; 2011. Pp. 71.
[15] Dagnew T, Tessema F, Hiko D. Health service utilization and reported satisfaction among adolescents in dejen district, Ethiopia: A cross-sectional study. Ethiopian Journal of Health Sciences. 2015;25(1):17-28.
[16] Atuyambe L, Mirembe F, Tumwesigye NM, Annika J, Kirumira EK, Faxelid E. Adolescent and adult first time mothers' health seeking practices during pregnancy and early motherhood in Wakiso district, central Uganda. Reproductive Health. 2008;5:13.
[17] Manganello JA. Health literacy and adolescents: a framework and agenda for future research. Health Education Research. 2008;23(5):840-47.
[18] Akbari N, Ramezankhani A, Pazargadi M. Accelerators/decelerators of achieving universal access to sexual and reproductive health services: a case study of Iranian health system. BMC Health Services Research. 2013;13(1):241.
[19] Roudsari RL, Javadnoori M, Hasanpour M, Hazavehei SMM, Taghipour A. Socio-cultural challenges to sexual health education for female adolescents in Iran. Iranian Journal of Reproductive Medicine. 2013;11(2):101.
[20] Farzdi F, Mafton F, Aeinparast A, Azin A, Omidvari S, Jahangiri k, et al. Peoples satisfaction from the health services and the factors affecting it: 'Health Study from the perspective of the Iranian people. Payesh. 2010;10(3):8.
[21] Abedian K, Shahhosseini Z. Barriers to health education in adolescents: health care providers' perspectives compared to high school adolescents. International Journal of Adolescent Medicine and Health. 2015;27(4):433-36.
[22] ITU releases 2015 ICT figures. 2015. Available from: https://www.itu.int/net/pressoffice/press_releases/2015/17.aspx.
[23] Corbin J, Strauss A. Basics of Qualitative Research 3th. London: Sage; 2008.
[24] Berk LE. Development Through the Lifespan, Sixth edition: Pearson Education inc; ISBN 978-0-205-95760-6. 2014.
[25] Ying L, Ma F, Huang H, Guo X, Chen C, Xu F. Parental monitoring, parent-adolescent communication, and adolescents trust in their parents in China. PLoS ONE. 2015;10(8):e0134730.
[26] Deb S. Role of home environment, parental care, parental responsibility and their relationship with adolescent's mental health. Injury Prevention. 2015;18(1):A44.
[27] DeWalt DA, Hink A. Health literacy and child health outcomes: a systematic review of the literature. Pediatrics. 2009;124(Supplement 3):S265-S74.
[28] Myers B, McLaughlin KA, Wang S, Blanco C, Stein DJ. Associations between childhood adversity, adult stressful life events, and past-year drug use disorders in the National Epidemiological Study of Alcohol and Related Conditions (NESARC). Psychol Addict Behav. 2014;28(4):1117-26.
[29] UN passes historic resolution on ending child marriage. Available from: http://www.who.int/pmnch/media/events/2014/child_marriage/en/. [Accessed 2014].
[30] Boß L, Lehr D, Berking M, Riper H, Schaub MP, Ebert DD. Evaluating the (cost-) effectiveness of guided and unguided internet-based self-help for problematic alcohol use in employees-a three arm randomized controlled trial. BMC Public Health. 2015;15(1):1043.
[31] Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development. 2011;82(1):405-32.
[32] Deb S, Strodl E, Sun J. Academic-related stress among private secondary school students in India. Asian Education and Development Studies. 2014;3(2):118-34.
[33] Eremsoy CE, Çelimli Ş, Gençöz T. Students under academic stress in a Turkish University: Variables associated with symptoms of depression and anxiety. Current Psychology. 2005;24(2):123-33.
[34] Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annual Review of Psychology. 2001;52(1):397-422.
[35] AlBuhairan FS, Olsson TM. Advancing adolescent health and health services in Saudi Arabia: exploring health-care providers' training, interest, and perceptions of the health-care needs of young people. Advances in Medical Education and Practice. 2014;5:281.
[36] Deogan C, Ferguson J, Stenberg K. Resource needs for adolescent friendly health services: estimates for 74 low-and middle-income countries. PLoS One. 2012;7(12):e51420.
[37] Reeves C, Whitaker R, Parsonage R, Robinson C, Swale K, Bayley L. Sexual health services and education: Young people's experiences and preferences. Health Education Journal. 2006;65(4):368-79.

PARTICULARS OF CONTRIBUTORS:
1. PhD Student, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Science, Tehran, Iran.
2. Associate Professor, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Science, Tehran, Iran.
3. Associate Professor, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Science, Tehran, Iran.
4. Pediatrician, Ministry of Health and Medical Education, Islamic Republic of Iran, Tehran, Iran.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Fatemeh Nahidi,
Associate Professor, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery,
Shahid Beheshti University of Medical Science, Tehran, Iran.
E-mail: nahidi@sbmu.ac.ir; Ghehsare21@gmail.com

FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: **Aug 07, 2016**
Date of Peer Review: **Sep 01, 2016**
Date of Acceptance: **Feb 01, 2017**
Date of Publishing: **May 01, 2017**