# A qualitative study of sexual health education among Iranian engaged couples.

Zahra Bostani Khalesi<sup>1</sup>, Masoumeh Simbar<sup>2</sup>, Seyed Ali Azin<sup>3</sup>

- 1. Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
- 2. Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Science, Tehran, Iran.
- 3. Reproductive Biotechnology Research Center, Avicenna Research Institute (ACECR), Tehran, Iran.

#### **Abstract:**

Background: Sexual health education for Iranian engaged couples is always ignored in the premarital education program.

**Objectives:** The aim of this study was to explore the necessity of sexual health education for Iranian engaged couples.

**Materials and methods:** This qualitative study was conducted in Rasht, Iran. The studied sample consisted of 38 engaged men and women; and also 9 health experts and policymakers. We used interview guides to collect data. The data was analyzed through content analysis method.

**Results:** Analyzing participants' perspectives revealed six themes including: (1) socio-cultural changes, (2) emerging social pathologies, (3) inadequate sexual knowledge; (4) challenges in providing sexual health services, (5) individual consequences and (6) social consequences.

**Conclusion:** Most participants emphasized the necessity of sexual health education not only because of medical concerns, but also from the perspective of social issues. Providing these services should be considered a priority.

Keywords: Sexual health, health education, qualitative study, Iran.

DOI: https://dx.doi.org/10.4314/ahs.v17i2.12

Cite as: Khalesi ZB, Simbar M, Azin SA. A qualitative study of sexual health education among Iranian engaged couples. Afri Health Sci. 2017;17(2): 382-390. https://dx.doi.org/10.4314/ahs.v17i2.12

### Introduction

Sexual health education (SHE) is a series of educational activities that help people to acquire the information, motivation, and behavioral skills to maintain and enhance their sexual and reproductive health. Effective SHE is the best way to ensure that people learn and adopt safe and healthy sexual behavior, and limit their risk and vulnerability to sexual ill-health and equipping of persons, couples, families and communities with the information and behavioral skills<sup>2</sup> and should be sensitive to gender,

# Corresponding author:

Masoumeh Simbar,
Department of Midwifery and
Reproductive Health,
School of Nursing and Midwifery,
Reproductive Endocrinology Research Center,
Research Institute for Endocrine Sciences,
Shahid Beheshti University of Medical Science,
Tehran, Iran.

Email: simbar@yahoo.com

age, ethnicity, religious, socio-economic background and physical/cognitive abilities and cultural values and norms<sup>3</sup>.

SHE has been recognized by international organizations as a human right and a necessity for development<sup>4</sup>. Despite the emphasis expressed, it also faces many challenges in most of the cultures and is often neglected and receives less attention due to cultural sensitivities, particularly in the Middle East region<sup>5</sup>. Because of cultural traditions and taboos, sexual problems tend to be concealed in Iran<sup>6</sup>. Iranian people think that sex education is contrary to their culture or religion for example many parents, teachers and policy-makers believe that sex education particularly in relation to girls can result in early sexual activity and privation of childhood innocence<sup>7</sup>.

In some countries such as Egypt, SHE is necessary for the beginning of the marital life<sup>8</sup>.

The first premarital education was done in 1924 by Ernest Groves for the families living in Boston University<sup>9</sup>.

Premarital education is therapeutic, precautionary and a relatively new approach to avoid dissatisfaction and failure in conjugal life<sup>10</sup>.

In Iran, the premarital training plan was ratified in 1991 and it was limited to teaching the prevention of unwanted pregnancy and genetic disease and sexual health was not taught<sup>11</sup>.

While SHE not only plays a major role in preventing negative consequences such as STDs, it also leads to positive results such as appropriate and pleasing sexual relationships<sup>12</sup>. In accordance with this viewpoint, the Pourmarzi's study<sup>13</sup> showed that the current content of the premarital education is not enough. According to Foroutan et al.'s14 study, sexual dissatisfaction is the reason of more than 50% of divorces in Iran. Despite the abundance of research regarding education needs of engaged couples, rarely investigations have been conducted on SHE. While benefiting from good health is the right of everyone. On the other hand, in general, research studies that have focused on education needs in Iran were done quantitatively and there is no qualitative study in this context<sup>12-15</sup>. Qualitative research should perform in situations where low knowledge exists such as sexual needs assessment in Iran. So, for the first time, we conducted a qualitative study in Iran with the aim of exploring the necessity of SHE for Iranian engaged couples.

# Methods Setting

The study was conducted in Rasht. Rasht is the largest city on Iran's Caspian Sea coast. The people of the Rasht speak the Persian language as of the official language of Iran. This study setting was Hamidian health care center in Rasht, Iran. Currently there are 16 urban health care centers in Rasht city, but only one of them (Hamidian health care center) provides premarital counselling. Urban and rural engaged couples refer to this center to get premarital counselling services.

### Design

The study was carried out over 6 months from November 2014 to May 2015 at the premarital counselling clinic at health care centers in Rasht, North of Iran.

We undertook this qualitative research as part of an exploratory sequential qualitative and quantitative study (mixed methods research) that investigated the sexual health educational needs of engaging men and women in Iran. I chose a qualitative design for this part because of the sensitive nature of the topic. A qualitative method is suitable for uncovering the complex human issues and what lies behind them. It is useful in situations where there is little pre-existing knowledge, the issues are complex and the maximum opportunity for exploration is desired<sup>17</sup>.

# Sample, inclusion and exclusion criteria

The studied sample consisted of 38 engaged men and women as well as 9 key informants. These samples were selected using purposeful sampling method with maximum variation sampling<sup>18</sup>.

The idea was to have the sample representation of key informants and project beneficiaries (engaged men and women). The participants were volunteer engaged men and women who had referred to health centers to get pre-marriage counseling with maximum variety of factors such as age, education, socio-economic status and place of residence (urban and rural). The inclusion criteria were; should be fluent in the Persian language, engaged, no chronic diseases or mental illnesses, and the individuals who were willing to participate in the study.

#### Procedure for data collection

Data collection was conducted using the semi- structured in-depth interview guide. Because of the depth and flexibility in qualitative studies, semi- structured interview was used for data collection<sup>19</sup>. The interviews were conducted face-to-face and in the appropriate places.

All participants first completed a demographic questionnaire, which contained information about age, gender, education, occupation and place of residence.

Interviews were conducted by open-ended questions using a semi-structured topic guide. The interviews were informal and conversational allowing participants to explain their experiences and understanding in their own words. The interview began with a general question (Could you please talk about your understanding about the concept of sexual health?), the major focus of the questions was (Could you please talk about the current situation of SHE in Iran?). The participants were asked to express their opinions, experiences, and views. The next questions

were asked based on the participants' experiences in order to obtain further information about the necessity of SHE. The interviews were recorded using a digital voice recorder. Each interview lasted between 45–60 minutes.

Data collection was continued until data saturation was reached; that is, the new data entered into the study did not create new themes or change the existing themes<sup>20</sup>. After each interview, it was transcribed immediately verbatim and word for word. For immersion in the data, the interview transcription was reviewed several times and was hand coded by two independent reviewers and compared for consistency of repeated observations.

# Data analysis

The interviews were analyzed using the qualitative content analysis method. Content analysis has a significant place in the wide range of investigators of themes21 and was therefore selected as a suitable method for the analysis of the study data. The tape-recorded interviews were transcribed in full by the researcher. Common concepts were coded as suggested by Miles and Huberman<sup>22</sup>, producing themes that were then classified into major themes and sub-themes. The themes and sub-themes were compared with each other and the themes were determined by analyzing and interpreting these themes and sub-themes. MAXqda2011 software was used to mark code and classify the transcribed data. One week after the initial coding, another separate coding was done and the generated sub-themes and themes in the second coding were then compared with the initial coding. This led to further refinements, producing sub-themes and themes that were interpreted for the meaning of the content. To detect the meaning unit, each interview was read and reviewed. All words, sentences, and paragraphs that included the most important points regarding the necessity of sexual health education was determined as the meaning unit. Then, the meaning unit was reviewed several times and were coded based on the conceptual and meaning unit. After extracting the original codes, similar codes were integrated and categorized based on the similarities. The researcher analyzed transcriptions to identify the main patterns of responses, consistencies and divergences across participants.

#### **Ethical considerations**

All Ethical issues (such as conflict of interest, misconduct, co-authorship, double submission, etc.) have been considered carefully. The research team to protect the right participants, explained the purpose of the study and ensured information privacy, confidentiality, withdraw from the study at any time. All participants took part in the study with written informed consent.

The volunteers were taken to a private room for a full explanation of the project and if the participant agreed, they completed a consent form and the interview began. Ethical permission (No. SBMU2.REC.1394.130) for the study was obtained from Shahid Beheshti University of Medical

Sciences.

### **Results:**

The study participants consisted of 23 women between the ages of 17-46 years and 15 men between the ages of 23-35 years. The participant characteristics are presented in Table 1.

Table 1: Socio-demographic variables for the lay informants

Variable/ Sex		Male (n=15)	Female (n=23)	Total (n=38)
		Range: 23-35	Range: 17-46	Range: 17-46
Age (years)		Mean:31.3	Mean:28.6	Mean:33.8
	Primary or Middle	2(13.3)	1 (4.3)	3 (7.9)
	School Education			
Education	High School	1 (6.7)	3 (13)	4 (10.5)
	Diploma	4 (26.7)	9 (39.2)	13 (34.2)
	Higher Education	8 (53.3)	10 (43.5)	18 (47.3)
	Housewife or Unemployed	2 (13.3)	15 (65.2)	17 (44.7)
	Government Employee	8 (53.3)	7 (30.5)	15(39.5)
Employment status	Self Employed	5 (33.3)	1 (4.3)	6 (15.7)
Residency	Urban	9 (4.3)	15 (65.2)	24 (63.2)
	Rural	6 (40)	8 (34.8)	14 (36.8)

In this study, health experts and policymakers were health education specialists, psychologists,psychiatrists, premarital education provider. Perceptions of participants regarding the necessity of sexual health education are presented in Table 2. These experiences have been categorized in 6 themes and 27 sub-themes.

Table 2: The themes and sub- themes in this study

Themes	Sub-themes	
Socio-cultural changes	Conflict between tradition and modernity, Sexual Preference, weak religious beliefs, increased incidence of high-risk sexual behavior, Addiction	
Newly emerging social problems	Harms caused by Internet abuse, Harms caused by cell phones abuse, Harms caused by satellite channels	
Insufficient sexual knowledge	Lack of formal education, unreliable sources, not receiving education from parents, limited knowledge of educators	
Challenges of providing sexual health services	lack of priority in policy-making, lack of social support, cultural resistance, high cost of consultation, lack of expert workforces, lack of insurance coverage for consultation	
Individual Consequences	Death, unnecessary cosmetic surgeries, prevalence of sexually transmitted diseases, marital dissatisfaction, cancers of the reproductive system, low sexual confidence	
Social consequences	Divorce, Emotional divorce, White marriage	

# Socio-cultural changes

The participants believed that Iran's entry into the new era along with the formation of a gap between the tradition and modernity, and present era had resulted in a significant conflict between tradition and modernity. One of the clergymen said: "Some people confuse nudity with civilization and think that the more naked they were, the more civilized they would become" (a 61-year-old clergyman).

The topic of change in sexual preference, especially among young people, is one of the points mentioned by the participants. In this regard, one of the participants said: "They are tempted to also experience other ways; some enjoy unconventional ways more than the normal one (vaginal intercourse)" (a 25-year-old man, high school diploma, self-employed).

The participants believed that lack of strong religious beliefs can have negative effects on health.

One of the participants said: "Unfortunately, we are now facing social immorality in the society and its major reason is the lack of religious beliefs" (a 61-year-old clergyman).

Addiction was also discussed by a small number of participants. One of the participants said: "In the past, seeing girls who were addicted or drank alcoholic beverages was very strange; but, nowadays, it has become very common" (a 29-year-old man, high school, self-employed).

# Newly emerging social problems

The participants believed that a large percentage of young people are at the risk of harms caused by Internet abuse, cell phone abuse, and satellite channels. The harms caused by Internet abuse is described by a participant as follows: "Surfing pornographic websites since they are more attractive, chatting, and online dating are also very popular". (25-year-old man, high school diploma, self-employed).

Another participant mentioned the harms caused by cell phone abuse: "They send private and erotic photos via applications such as Viber and WhatsApp". (33-year-old woman, high school diploma householder).

One of the points repeatedly expressed by the participants was the harm caused by satellite channels. In this regard, one of the participants said: "The impact of satellite channels cannot be ignored; however, if some families do not have computers or satellite receivers, their kids would

go to school and get the information from other kids, which would be probably even more exciting to fit their world. So, the impact of satellite channels is not only on the family, but also on the society". (35-year-old woman, Postgraduate student of psychology.

### Insufficient sexual knowledge

The participants stated that they did not have enough knowledge about sexual health and emphasized the need for improving their sexual knowledge. Also, they believed that lack of formal education is one of the main reasons of their insufficient knowledge. In this regard, one of the key informants said: "Officially, we still do not see anything in our health system about these issues" (a 48-year-old man, Clinical psychologist).

Another reason for the insufficient sexual knowledge mentioned by the participants was the existence of unreliable sources. One of the participants said: "At schools, my friends play some movies on their cell phones and what I currently know originates from that source. They are horrible; I talked to one of my married friends and he said that reality is something else" (18-year-old woman, high school diploma householder).

Another point mentioned by the participants was the lack of receiving an education from parents.

In this regard, one of the participants said: "Most Iranian families are ashamed of talking about sexual issues with their children; if children ask something out of curiosity, parents pretend they have not heard anything or change the subject, because they believe that when children aware about sexual issues, it would be hard to control them" (33-year-old man, bachelor of food science, employee).

Another reason for the lack of sexual information maintained by a small number of participants was the limited knowledge of educators. One participant said: "Almost all schools have educators; but, sexual topics are not included in the syllabus and also educators might not have adequate knowledge, since they have not passed any particular education courses on this topic" (38-year-old woman, Master of Educational Sciences, teacher).

# The challenges of providing sexual health services

The findings of this study showed that participants were concerned with the lack of priority for sexual health in policy-making. In this regard, one of the participants said: "Certainly, they know what is going on, they are right, they do not know how people react if they tell them about these things" (31-year-old man, associate degree in textile, self-employed). The participants mentioned lack of social support, emphasizing that currently there is no support for sexual health education. One of the participants said: "Many of the problems with which we are facing now are related to lack of support" (31-year-old man, associate degree in textile, self employed).

The participants mentioned that taboos and cultural resistance have resulted in silence. One of them said: "Considering these things as anti-value makes many people avoid talking about their sexual problems and they live with their problems

for many years" (33-year-old man, bachelor of geography, teacher).

The participants reported that the high cost of consultation prevents them from receiving consulting services. One of the participants said: "Cost of consultation is too high and they think consultants will tell them the things they already know and charge the clients too high fees" (43-year-old woman, high school diploma, health care communicator).

The participants emphasized that one of the most obvious insufficiencies is lack of expert workforces. One of the participants said: "I have not heard of any experts in this field (sexual Health) in Rasht city" (25-year-old man, high school diploma, self-employed).

The participants believed that lack of insurance coverage for consultations threatens sexual health. One of the participants said: "For half an hour consultation, you have to pay 30 - 40 thousand Tomans and it is not covered by the insurance" (27-year-old man, high school diploma, self-employed).

### Individual consequences

Death is one of the negative consequences caused by ignoring sexual health education that was mentioned by some of the participants. One of the Key informants said: "They are dipping his head inside the hag during masturbation to reach hypoxia, because by reducing oxygen supply, sexual pleasure would increase; however, some people may die in such a condition" (48-year old man, Clinical psychologist).

Unnecessary cosmetic surgeries were the other concern indicated by some of the participants. In this regard, one of the participants said: "If people are trained about the risks of their actions, they would not go for unnecessary cosmetics such as labia minor reduction and the like" (a 33-year-old woman, a PhD in Health Education).

The high rate of sexually transmitted diseases resulting from poor knowledge about sexual health was another issue mentioned by some participants. In this regard, one of the participants said:

"Sexually transmitted diseases are among the things which threaten people who have sexual relationship with several partners" (a 61-year-old clergyman).

In addition to the prevalence of sexually transmitted diseases that was the concern of participants, marital dissatisfaction was also mentioned by all of them. One participant said: "If partners are not sexually satisfied or do not experience what they expect, many cases of marital dissatisfaction may be entailed" (a 23-year-old man, Student).

The participants believed that the reproductive system cancer is one of the individual consequences of lack of sexual health education. One of them said: "I have heard that some of these sexually transmitted diseases can also cause cancer" (a 43-year-old woman, high school diploma holder, healthy relationship).

The participants believed that sexual confidence was low among many young people and note that, if the people have sufficient knowledge about sexual relationships and sexual health, their sexual confidence would also increase. One of the participants said: "Some people compare themselves with actors in movies and, then, they think they have sexual problems and lose their confidence" (a 33-year-old woman, a PhD in Health Education).

# Social consequences

The participants noted that a large number of divorces were caused by lack of necessary education about sexual health. A psychologist said: "Sexual problems are not probably the direct cause of divorce or not mentioned explicitly in studies; but, they are undoubtedly hidden among other reasons for divorce. However, couples do not talk about them because of modesty and shame or neglect them in their life conflicts" (a 48-year-old man, Clinical psychologist).

Another negative social consequence mentioned by the participants is emotional divorce. One of them said: "If a relationship is not good, the couple will lose their feeling toward each other. This condition is called emotional divorce" (a 38-year-old woman, Master of Educational Sciences, teacher).

White marriage was one of the concerns of the participants. One of them said: "The ominous phenomenon with which the society is now facing is informal marriage, i.e. White marriage" (a 61-year-old clergyman).

#### Discussion

This is the first qualitative study in Iran that explains the essential in providing sexual health education to the engaged marriage couples. Data analysis resulted in six themes, socio-cultural changes, emerging social pathologies, inadequate sexual knowledge; challenges in providing sexual health services, individual consequences and social consequences.

Most of the participants in this study regard socio-cultural changes as the main reasons for the necessity of providing sexual health education to engaged couples. The participants believe that Iran is currently facing significant challenges between tradition and modernity, which could be the reasons for socio-cultural changes in recent years

and a threat for the sexual health of the society. Transfer of Western culture and ideas for the country has changed Iranian values and behavioral models, caused a conflict of values between tradition and modernity, and formed different approaches to the issues such as sexual problems which also affects sexual behavior<sup>23</sup>.

Most of the participants stated that sexual relation preference has been changed in Iran, which is in agreement with the results by Hashemi et al<sup>24</sup>, indicating an increase in different methods of sexual intercourse, including non-vaginal intercourse among Iranian women. Unconventional sexual behavior may physically and mentally damage health of people and their sexual partners' and also place their family and social status at risk. Some participants believe that lack of strong religious beliefs can be a threat to sexual health which is in accordance with the study by Michael et al<sup>25</sup>, He reported lack of religious beliefs as a factor for deviation from sexual behavior. The increased incidence of high-risk sexual behaviors is also discussed by most participants as the threatening factor of sexual health which can increase the incidence of sexually transmitted diseases and its negative consequences<sup>26</sup>. Addiction is also introduced as another factor which threatens sexual health. High-risk sexual behaviors are very common among those addicted to stimulant drugs<sup>27</sup>.

Our findings are similar to those reported by Gray et al<sup>28</sup>, who indicated that abusing of the internet, cell phone, and satellite channels largely exposes the young to highrisk sexual behaviors. Many countries are planning to prevent and deal with newly emerging harms at the time of entry of/increase in technology; but, no specific planning and provision have been developed in Iran for the rapid expansion of cell phone technology and development of cyberspace and the internet. Therefore, the newly emerging social problems are increasing Iran. According to the study by Takao et al<sup>29</sup>, in the case of improper use of emerging technologies, people may face the new opportunities for deviation or at least the process might be facilitated, which have negative effects on their sexual behavior. Therefore, a comprehensive sexual health education program can be effective for preventing the devastating effects of new technologies; however, new technologies are both an opportunity and a threat; some strategies should be implemented in order to use them for improving health, which requires simultaneous inclusion of socio-cultural attachment along with technology<sup>30</sup>.

In this study, participants' insufficient sexual knowledge is discussed as one of the factors threatening sexual health not only by the participants themselves, but also through the numerous questions they asked from the researcher, which indicated the depth of their lack of knowledge, as mentioned in the results of other studies<sup>12-15</sup>. The reasons for this insufficient knowledge includes the lack of formal education, unreliable sources, lack of receiving an education from parents and limited knowledge of educators<sup>10</sup>. Our findings are similar to those of Javadnoori et al<sup>6</sup>, they showed that lack of proper sexual knowledge and attitude, mis-education, and inappropriate sources of sexual knowledge were the causes of young people's sexual unawareness. Unfortunately, in many cultures, parents do not feel comfortable to talk about sexual issues with their children; therefore, they are not an effective source of information and support as far as these issues are concerned, which could lead children to rely on unreliable resources<sup>31</sup>. Unreliable knowledge sources usually cause transfer of misconceptions and incorrect information<sup>32</sup>. Taboos, beliefs, and traditions may also prevent young people from accessing sufficient and accurate information about sexual health<sup>33</sup>. Although sexual health education is emphasized for all members of the society during their entire life, there is still no comprehensive and formal education for engaged couples in Iran<sup>12-14</sup>.

Most of the participants in this study consider the challenges of providing sexual health service as a factor threatening the sexual health. Our findings are similar to the results of the study by Farahani et al<sup>34</sup>, who showed a large gap in Iran in terms of providing sexual health services including intervention strategies in order to improve sexual health. Iranian people, especially the young, do not have access to enough information and adequate sexual health services. Lack of social support is discussed as one of the factors causing challenges in providing sexual health services. According to the results reported by Eisenberg<sup>35</sup>, sexual health education program needs social support like any other educational program. Therefore, policy-makers and the people responsible for planning health programs must be convinced that sexual health education is a necessary part of educational programs before marriage.

Cultural resistance is another challenge-causing factor in providing sexual health services that is discussed by the participants in this study. In this regard, our findings are similar to those in the study by Latifnejad et al<sup>36</sup> their results showed that cultural resistance poses a greater challenge than religious prohibitions in providing sexual health education. More than half of the participants in this study emphasize the high cost of consultation as one of the obstacles in receiving consulting services. Also, the participants note the lack of experts as one of the factors causing a challenge in providing sexual health services. Allocation of experts to different geographical parts of Iran should be done based on health requirements of people in that region and, in case of not providing an appropriate model for the allocation of experts, the equal and fair access to health care may face problems<sup>37</sup>. A number of participants believe that lack of insurance coverage for consultations can cause challenges in providing sexual health services.

Lack of insurance coverage is one of the important factors, which negatively affects access to health care<sup>38</sup>.

Some studies have proposed sexual health education as one of the most effective ways for protecting the young from negative consequences such as sexually transmitted diseases. Nowadays, people with low sexual knowledge are more exposed to negative sexual consequences, including sexually transmitted diseases, whereas having correct information would increase the possibility of adopting a responsible and free decision in the area of sexual health<sup>28</sup>. In addition, sexual health education for the young improves their confidence which consequently prevents them from unnecessary cosmetic surgeries<sup>39</sup>. Through increasing awareness, sexual education would increase marital satisfaction among couples<sup>12</sup>.

In this study, the participants also discuss some of the social consequences of lack of sexual health education, including divorce, emotional divorce, and white marriage. In recent years, divorce in Iran has become widespread, such that according to the latest statistics from the Iran National Organization in 2014, divorce rate increased by 5.3% compared to the same period in the previous year (2013)<sup>40</sup>. Considering the fact that increased sexual satisfaction would also increase marital satisfaction and overall happiness in life<sup>41</sup> and there is sexual dissatisfaction in more than 50% of divorces, thus it is necessary to integrate sexual health education programs into pre-marriage education courses<sup>13</sup>."White marriage" a growing trend for young couples in Iran. The new application is of Persian language as "White marriage" is the official term to

describe co-habitation (not with common law marriage). This link unlike permanent and temporary marriages, not religious, most Iranians have no place in our tradition, because boys and girls without holding a ceremony and for economic and emotional benefits, are under one roof<sup>24</sup>.

### Conclusion

Although there are major obstacles about SHE for Iranian engaged couples, it does not mean that SHE for engaged couples would be impossible in Iran. Our findings suggest that integrating SHE into the current premarital educational program approved by ministry of health could promote the awareness of couples about sexual health, marital satisfaction and enable couples to prevent STDs. Therefore more research in this area could increase marital satisfaction and decrease divorce among the Iranian people.

### Acknowledgments

This study was a part of a dissertation for receiving the PhD degree in Reproductive Health and was supported by the Shahid Beheshti Medical Science University, Tehran, Iran. The authors extend their thanks to all the participants who kindly shared their experiences.

#### Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

#### References

- 1. Lottes IL. Sexual rights: meanings, controversies, and sexual health promotion. *J Sex Res.* 2013; 50(3-4):367-91. [DOI: 10.1080/00224499 .2013.764380]
- 2. Flicker S, Guta A. Ethical approaches to adolescent participation in sexual health research. *J Adolesc Health*. 2008; 42(1):3–10. PubMed
- 3. Levine D, McCright J, Dobkin L, Woodruff AJ, Klausner JD. SEXINFO: a sexual health text messaging service for San Francisco youth. *Am J Public Health.* 2008; 98(3):393–395. [doi:10.2105/AJPH.2007.110767. *Epub* 2008 Jan 30
- 4. Leslie KM. Harm reduction: An approach to reducing risky health behaviors in adolescents. *Paediatr Child Health*. 2008; 13(1):53–60. PubMed
- 5. DeJong J, Shepard B, Jawad R, Mortagy I. The sexual and reproductive health of young people in the Arab countries and Iran. *Reproductive Health Matters* 2005; 13:49-59. PubMed

- 6. Javadnoori M, Hasanpour M, Hazavehei SMM, Taghipour A, Female adolescents' experiences and perceptions regarding sexual health education in Iranian schools: A qualitative content analysis. *Iranian J Nursing, Midwifery Res* 2012.17: 539-46.PubMed
- 7. Geshtasbi A, Azin SA. Sexual education programs, necessity and moral considerations. *Iranian J Med Ethics History*. 2012; 5(2):1-19.
- 8. CATALYST Consortium/ TAHSEEN Project. Reproductive Health Services for Young, Engaged and Newly Married Couples. 2004.
- 9. Doss BD, Rhoades GK, Stanley SM, Markman HJ, Johnson CA. Differential use of premarital education in first and second marriages. *J FAM Psychol.* 2009; 23(2). doi: 10.1037/a0014356.
- 10. Refaie shirpak Kh. Sexual health. Hatami H, Razavi S, Ardabily H. Comprehensive Public Health Book. 5<sup>th</sup> Edition. *Arjmand Pub, Tehran, Iran* 2015.
- 11. Pour-Mohseni F, Fathi A, Azad-Fallah P, Ahmadi F. Effectiveness of marital enrichment programs on couples' marital satisfaction. *J Clin Psycholy*. 2011. 3(1): 27-37. URL. http://jcp.semnan.ac.ir/article-1-399-en.html
- 12. Farnam F, Mir-mohammadali M. Effect of pre-marriage counseling on marital satisfaction of Iranian newlywed couples: a randomized controlled trial. *Sexuality & Culture*, 2011. 15(2): 141-52.
- 13. Pourmarzi D, Merghati Khoei E. Sexual and Reproductive Health Education Needs in Engaged Couples in Tehran in 2010. *Sexuality Research and Social Policy*, 2014, 11 (3): 225-32.
- 14. Foroutan S, Jadidmilani M. The prevalence of sexual dysfunction among divorce requested. *Daneshvar Medicine*. 2008. 16(78):39–44.
- 15. Moodi M, Sharifirad G. The effect of instruction on knowledge and attitude of couples attending pre-marriage consultation classes. *J Educ Health Promot*, 2013. 2(52). [doi: 10.4103/2277-9531.119038. eCollection 2013 16. Merghati Khoei E, Whelan A, Cohen J. Sharing beliefs: what sexuality means to Muslim Iranian women living in Australia. *Cult Health Sex.* 2008; 10(3):237-48. doi: 10.1080/13691050701740039.
- 17. Pranee Liamputtong Qualitative Research Methods Oxford University Press, 4<sup>th</sup> Edition, 2012.
- 18. Coyne T, "Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries?" *Journal of Advanced Nursing*, vol. 26, no. 3, pp. 623–630, 1997. DOI: 10.1046/j.1365-2648.1997.t01-25-00999.

- 19. Griffiths P and Bridges J. Nursing Research Methods. *Qualitative Approaches*, CA: Sage, 2 Ed. 2014.
- 20. Creswell J. Reserch Design Qualitative, Quantitative and Mixed Methods Approaches. *SAGE Publications*, 4 ed. 2009.
- 21. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Bryman A,Burgess RG, editors, analyzing qualitative data London: *Routledge*; 1994. p. 172-194.
- 22. Miles MB, Huberman AM. Qualitative data analysis: A sourcebook of new methods. *Beverly Hills, CA: Sage*, 1984.
- 23. Jean A. Shovellera, Joy L. Johnsonb, Donald B. Langillec, Terry Mitchell. Sociocultural influences on young people's sexual development. *Social Science & Medicine* 2004. 59 p. 473-487. [PubMed], PMID: 15144759
- 24. Hashemi S, Fahimeh Ramezani Tehrani, Seyed Mehdi Hasanzadeh Khansari, Nahid Khodakarami, Sexual Behavior of Married Iranian Women, Attending Taleghani Public Health Center. *J Reprod Infertil*, 2013. 14(1): p. 34-38. PubMed. PMID: 23926559
- 25. Michael J, Jeremy E, Uecker D. The Role of Religion in Shaping Sexual Frequency and Satisfaction: Evidence from Married and Unmarried Older Adults. *J Sex Res*, 2011 Mar; 48(2-3): 297–308. [doi: 10.1080/00224491003739993.
- 26. Tolman DL, Striep MI, and Harmon T. Gender Matters: constructing a model of adolescent sexual health. *J Sex Res.* 2003; 40:4–12. PubMed. PMID: 12806527
- 27. Ghebremichael MS, Finkelman MD. The effect of premarital sex on sexually transmitted infections (STIs) and high risk behaviors in women. *J AIDS HIV Res*.2013; 5:59–64. PubMed. PMID: 23626920
- 28. Gray NJ, Klein JD. Adolescents and the internet: health and sexuality information. *Curr Opin Obstet Gynecol*. 2006; 18(5):519–524. PubMed. PMID: 16932046
- 29. Takao M, Takahashi S, Kitamura M. Addictive personality and problematic mobile phone use. *Cyberpsychol Behav.* 2009; 12(5):501-7. DOI: 10.1089/cpb.2009.0022.
- 30. Bleakley A, Hennessy M, Fishbein M, Coles HC, Jordan A. How sources of sexual information relate to adolescents' beliefs about sex. *Am J Health Behav.* 2009; 33:37–48. [PubMed]. PMID: 18844519
- 31. Ross DA, Changalucha J, Obasi AI, Todd J, Plummer ML, et al. Biological and behavioural impact of an ad-

- olescent sexual health intervention in Tanzania: a Community-randomized trial. *AIDS*. 2007; 21:1943–1955. PubMed. PMID: 17721102
- 32. Smerecnik C, Schaalma H, Gerona K, Meijer S, Poelman J. An exploratory study of Muslim adolescents' views on sexuality: Implications for sex education and prevention. *BMC Public Health*. 2010; 10:533. doi: 10.1186/1471-2458-10-533.
- 33. Abedian K, Z. University students' point of views to facilitators and barriers to sexual and reproductive health services. *Int J Adolesc Med Health*, 2014. 26(3): 387-92. doi:10.1515/ijamh-2013-0316.
- 34. Farahani FK, Shah I, Cleland J, Mohammadi MR. Adolescent males and young females in Tehran: differing perspectives, behaviors and needs for reproductive health and implications for gender sensitive interventions. *J Reprod Infertil.* 2012; 13(2):101–10. PubMed. PMID: 23926532
- 35. Eisenberg ME, Bernat DH, Bearinger LH, Resnick MD. Support for comprehensive sexuality education: perspectives from parents of school-age youth. *J Adolesc Health.* 2008; 42(4):352–359. doi: 10.1016/j. jadohealth.2007.09.019. Epub 2007 Dec 26
- 36. Latifnejad Roudsari R, Javadnoori M, Hasanpour M, Hazavehei SM, Taghipour A. Sociocultural challenges to sexual health education for female adolescents in Iran. *Iran J Reprod Med.* 2013; 11(2):101-10. PubMed. PMID: 24639734
- 37. Mitton C, Donaldson C. Resource allocation in health care: health economics and beyond. *Health Care Anal.* 2003; 11(3):245-57. PubMed PMID: 14708936
- 38. Dongenb E, Dekkerc J, Geertzend J, Dekkere J. Potential barriers to the use of health services among ethnic minorities: a review. *Family Practice*, 2006, 23 (3): 325-348. PubMed. PMID: 16476700
- 39. Marge Berer. Cosmetic surgery, body image and sexuality. *Reproductive Health Matters*, 2010,18(35): 4–10. doi: 10.1016/S0968-8080(10)35518-2
- 40. Http://WWW.Sabteahval.ir/default.aspx
- 41. Zargar F, Foruzandeh E, Omidi A. Psychological Health and Marital Adjustment in Iranian Employed Veterans and Veterans Receiving Disability Pension Iranian. Red Crescent Medical Journal. 2014; 16(7). doi: 10.5812/irc-mj.10219. Epub 2014 Jul 5.