

# Self-Care Needs in the Domains of Knowledge, Attitude and Performance of Adolescent Girls with Regard to Drug Addiction and Risky Sexual Behaviors in Iran

## Abstract

**Background:** Knowing about sexual issues and substance abuse is crucial for girls in preventing high-risk behaviors in the medical, social, cultural, and evolutionary levels. The aim of this study was to determine the self-care needs of adolescent girls in the domains of knowledge, attitude, and performance with regard to drug use and risky sexual behaviors. **Materials and Methods:** This cross-sectional study was conducted in the secondary schools located in the third district of Isfahan. Data were collected from 384 female students by systematic random sampling on 2019, and using a four-part questionnaire including demographic characteristics and self-care needs (knowledge, attitude and performance), drug addiction and unsafe sexual behaviors were measured and then were analyzed using descriptive and inferential statistics. **Results:** According to the adolescents, “familiarity with infectious diseases caused by drug addiction”, “alcohol consumption, drugs and smoking as a way of forgetting problems” and “learning the skills of excitement control,” were their first self-care priorities in terms of awareness, attitude, and performance, respectively. Additionally, “understanding the social and mental effects of relationships with the other sex”, “separating the children’s bedrooms from that of parents” and “ways of caring for personal hygiene in menstruation period and travel time” were considered as their first self-care priorities in terms of knowledge, attitude, and performance with regard to sexual behaviors, respectively. **Conclusions:** Based on the results, more effective interventions to protect the adolescents from being involved in substance use and sexual harmful behaviors are recommended through the training of self-care needs in adolescents.

**Keywords:** Adolescent, dangerous behavior, self care, substance-related disorders, unsafe sex

## Introduction

High-risk behaviors are defined as behaviors with an adverse effect on the overall growth and health of adolescent or may prevent them from future progress and success. High-risk behaviors may include violent behaviors such as physical harm or behaviors such as alcoholism, smoking, high-risk sexual behavior, and narcotics.<sup>[1]</sup> Smoking, consuming alcohol, drugs, and risky sexual behavior in the ages of 15–19 are among the major concerns of the world, to the extent that adolescents aged between 15 and 19 account for 19 million new cases of sexually transmitted infections per year.<sup>[2]</sup> A study in Iran reported that 7.8% of the samples (31 students) had experienced drug abuse at least once of whom 26 were male and five were female.<sup>[3]</sup> Moreover, many studies have shown that using hookah by girls and boys (59%) has been more prevalent than

cigarette smoking (32.7%), drug use (7.3%), and alcohol consumption (16.7%).<sup>[4]</sup> Findings of the study conducted by Abebea (2018) indicated that alcohol consumption was associated with sexual problems in students and had negative physical, sexual, and psychological consequences for the subject and victim.<sup>[5]</sup> Drug abuse and risky sexual behaviors account for most mortalities of adolescents and early adults. Human Immunodeficiency Virus (HIV) infection and sexually transmitted diseases, school drop-out and school runaway, academic and occupational failure, pregnancy, and involvement in various crimes are among other consequences of high-risk behaviors. Three factors affecting risky behaviors in adolescents are lack of knowledge, inadequate attitude and, finally, inappropriate performance.<sup>[6,7]</sup> The main causes of high-risk behaviors in adolescents is the lack

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of a proper understanding of the consequences of high-risk behaviors, which is due to their inadequate development.<sup>[8]</sup> Findings of the study also indicated that the girls had inadequate knowledge about sexual issues and knowing these issues is crucial factor for preventing the adolescent girls from high-risk behaviors in medical, social, cultural, and evolutionary levels.<sup>[9]</sup>

Those adolescents who consider the benefits of substance abuse more than their negative consequences and hold a positive attitude towards drug use are at risk of drug use. Self-care is one of the methods of preventing and reducing the spread of disease in the society, which includes all activities related to maintaining health, preventing and treating the disease by the individuals themselves.<sup>[9]</sup> The available evidence suggests that self-care reduces the number of visits associated with early and immediate care<sup>[10]</sup> and has more control over health that, subsequently, promotes the whole health system by improving people's health and their quality of life, increasing life expectancy, and productivity in life.<sup>[11]</sup> According to a study, Taiwanese adolescents had a high level of self-care with regard to alcohol-related behaviors and high-risk sexual behaviors and, thus, such behaviors are less observed in these adolescents. Therefore, the consideration of self-care seems to be necessary for the adolescents. This study indicated that self-care training about sexual behavior increases these adolescents' knowledge, insight and sexual performance and reduces the incidence of high-risk behaviors in them.<sup>[12]</sup> Effective programs that achieve their ultimate and specific goals begin with needs assessment. Needs assessment reveals key points and initiates the process of production and design in health education and health promotion programs, and includes a process of identification and determination of the health-related prioritized needs in a given population.<sup>[13,14]</sup>

Since the sexual behaviors of the adolescents in a society are shaped by knowledge, attitudes, values, beliefs, and social norms, paying close attention to the views of adolescents and careful examination of their sexual decision-making is crucial, critical, and underlying.<sup>[15]</sup> In Iranian culture, premarital sex is not accepted. Given the high sensitivity of sex in this culture, there is little information available on the prevalence, attitudes and beliefs of adolescents in this regard.<sup>[16]</sup> Additionally, understanding the motivations of the adolescents for doing or avoiding sex allows healthcare providers to take more effective actions.<sup>[17]</sup> Considering the nature of needs training and the modality of providing these training with regard to the health of adolescent girls, it is necessary to have an in-depth study of how these trainings are influenced by the cultural and social factors of any society, especially Iranian religious and traditional culture. Moreover, as premarital sexual relationship and drug use is an unacceptable action for adolescents, especially adolescent girls, the understanding, and identification of the needs of self-care against these high-risk behaviors is a problematic challenge in Iranian society. As such, the basic question of this research is what do the adolescent girls need to take care of themselves against high-risk behaviors such as

substance abuse and high-risk sexual behaviors? Therefore, the present study aimed at determining the self-care needs of adolescent girls in the domains of knowledge, attitude, and performance with regard to the use of drugs, stimulants, and performing risky sexual behaviors.

## Materials and Methods

This is a descriptive cross-sectional study conducted as a part of an interventional training program based on the Orem model. The research samples consisted of 384 secondary school girl students aged between 16 and 18 years who were selected from 1 January to 5 February 2019 in Isfahan city schools, Iran. The setting of the research included schools of six educational districts in Isfahan (Iran). The schools and the students were selected by random sampling method. The sample size was obtained to be 384 subjects with power 80%, confidence 95%, frequency of each need 0.5, alpha error 5%. The data collection tool was a self-made demographic questionnaire and self-care needs inventory in knowledge, attitude, and performance with regard to drug use, stimulants, alcohol, cigarettes, and sexual behaviors. Demographic characteristics inventory included age, field of study, and average grade, and self-care needs inventory consisted of 8 questions about the knowledge-related needs, 7 questions about the attitude-related needs, 5 questions about the performance-related needs in the area of drug use, as well as 6 questions about the knowledge-related needs, 8 questions about the attitude-related needs, and 5 questions about the performance-related needs in the domain of sexual behavior. Each question was prioritized and while number 1 had the highest priority and the last number had the least priority. Validity of the questionnaire of needs assessment was examined using content validity method (face validity, content validity ratio, and content validity index) and using the opinions of 15 professors and experts in the field of addiction studies, experts in the field of high-risk behaviors and experts in the area of school health, religious specialist, and psychologist. The Content Validity Ratio (CVR) of the questionnaire was 72% and the Content Validity Index (CVI) obtained to be 82%; its reliability was also confirmed by test-retest method which was 0.89 (two weeks after the completion of the first questionnaire). With regard to the face validity, in addition to the opinions of experts, the views of educators and students were used to correct the questionnaires. After obtaining the written informed consent from adolescents and their parents, they entered the study. Then, since Isfahan Education Department consists of 6 districts, out of these 6 districts, 35 schools were selected by lot. And then she received a list of girls' secondary schools located in this district. As such, most of the schools were selected from the areas where more schools were located. So that, five schools were in districts 1, six schools in districts 2, seven in districts 3, 11 in districts 4, four in districts 5, and six in districts 6, of which 10 schools were selected using quota and random sampling.

Finally, 384 samples were selected for need assessment. Inclusion criteria were willingness to participate in research and being school student, and exclusion criterion was the

students' unwillingness to complete the questionnaire. Each student was given one hour of class time to complete the questionnaire. After collecting the data, the data were analyzed using SPSS software version 20 as well as descriptive statistics (absolute and relative frequency distribution and percentages) and inferential statistics (Independent t-test, ANOVA with repeated measures).

### Ethical considerations

Ethical considerations such as obtaining informed written consent from the participants for attending the study, respecting anonymity and confidentiality, and subjects' right to leave the study whenever they liked were observed in this study. Students were assured that their information was kept confidential. Prior to the research, written parental consent was obtained from the parents in a meeting at every school. The present study has a registration code (IR.MUI.RESEARCH.REC.1397.304) in ethics committee of Isfahan University of Medical Sciences.

### Results

About 384 students participated in the study whose age ranged from 14 to 19 years with a Mean (SD) age of 16.38 (1.86) years [Table 1]. As the results showed, according to the mean (SD) 3.62 (3.45) of self-care needs priority in the domain of addiction-related knowledge, the first priority for adolescents was "familiarity with the transmitted infectious diseases caused by drug addiction" and the last priority was "familiarity with the statistics of people who are drug users in the whole country"; according to the mean (SD) 5 (2.15) of priorities, the first priority was "familiarity with the psychological effects of relationship with the other sex 2.29 (1.18) and the last priority was "the function and description of the genitals" 2.64 (1.35) [Table 2].

With regard to the mean (SD) of self-care needs in the domain of attitude toward addiction, the results showed that the item "alcohol consumption, drugs and smoking as a way of forgetting the problems" 1.87 (0.65) was selected as the first priority and the item "smoking and drug use is a sign of person's higher personality" as the last priority 5.10 (4.31).

**Table 1: Frequency distribution, field of study, grade point average, and renewal history of Subjects**

Variable	n (%)
Field of Study	
Art	245 (64)
Literature	92 (24)
Experimental Science	46 (12)
Grade point average	
12-14	24 (6.30)
15-17	192 (50.10)
18-20	167 (43.60)
Renewal history	
Yes	69 (18)
No	314 (82)

Moreover, with regard to the attitude towards sexual behaviors, the first priority was "the parents' bedroom should be separated from that of the children 92.30 (5.89) [Table 3].

Prioritizing self-care needs in the domain of performance toward addiction included the first priority of "learning the skills needed for the control of excitement" 2.22 (1.62) and the last priority of "the need to know about the proper performance for staying away from addiction" 62.90 (3.49). With regard to the prioritization of self-care needs in the domain of sexual behaviors 1.87 (0.65), the first priority was "appropriate action when you have had sex" 2.38 (1.53) [Table 4]. Findings indicated that with regard to the prioritization of different educational methods for better learning of the samples, the first to seventh priorities included film and photo, lectures, group discussions, role play, holding competitions, pamphlet, and Short Message Service (SMS).

### Discussion

Nowadays, the issue of promoting the health of students has been considered in the increasingly growing educational documents. In this regard, providing the conditions for the promotion of knowledge and awareness among students seems to be essential. Obviously, identification of the students' needs with regard to health and prevention of high-risk behaviors such as substance use and unsafe sexual behaviors, as well as the identification of the priorities in this area can contribute to design of the programs for training these students. As the results indicated, the girls introduced the phrase "familiarity with the types of transmitted infectious diseases caused by drug addiction" as the most important need with regard to their addiction-related knowledge. The results showed that sexually transmitted infections are prevalent among adolescents. The use of alcohol and drugs and the non-use of condoms had a significant relationship with sexually active adolescents.<sup>[18]</sup> According to the results of another study, there was a strong relationship between alcohol and drug use and sexual behaviors, that highlights the significance of training about sexual issues.<sup>[19]</sup>

The results of this study indicated that girls considered "familiarity with the psychological and social effects of relationship with the opposite sex" as the most important need of knowledge about sexual behaviors. The results also showed that the relationship with the opposite sex in adolescents may reduce their relationship with their family, especially their emotional and intimate relationship with their mothers.<sup>[20]</sup> The involvement of mental space, dependence, diversity, reflection, and emotional enjoyment was the result of another study about adolescent sexual relations before marriage which indicated that girls' knowledge about sexuality is low, and its increase is important for girls to prevent high-risk behaviors in medical, social, cultural, and evolutionary dimensions.<sup>[21,22]</sup> In a study conducted on students, it was shown that addiction and sexual behaviors are prevalent among them, and training programs can be effective in reducing the high-risk behaviors of adolescents.<sup>[23]</sup> The results of

**Table 2: Frequency distribution of the priority of self-care needs in the domain of knowledge about addiction and sexual behavior in the subjects**

The domain	Phrase	Priority									Mean (SD) order
		1	2	3	4	5	6	7	8*	9**	
Knowledge towards addiction	1) With the effects of various types of drugs on the body	34	5.47	22	6.50	7	2	5	3	12	3.81 (2.32) Second
	2) Effects of drugs on the psyche	38	3.50	19	7.33	6.0	1	5	4	12.30	3.82 (4.122) Third
	3) With reasons for a youth's tendency to use drugs	35	6.30	11	9	6.50	3.50	5	5	15	4.17 (3.20) Fifth
	4) statistics of drug users in the whole country	20	5.30	16	10	6.60	4	6.50	8	19	5 (2.15) Seventh
	5) Infectious diseases transmitted through addiction	42	8.30	13	7	5	1.50	2.50	4	13	3.62 (3.45) First
	6) Effects of hookahs and cigarettes	32	8	14	11	6	2.40	2.60	6	1.63	4.11 (2.33) Fourth
	7) Social consequences of drug use	25	10	1.63	12	7	2.10	5	5.15	14	4.47 (2.56) Sixth
Knowledge towards risky sexual behaviors	1) Function and description of the genitals	50	4	22	2.80	3	16	2.30	-	-	2.64 (1.35) Sixth
	2) Function and description of genital system and puberty	51	9	18	5.20	3.60	11	2.20	-	-	2.42 (1.23) Fourth
	3) Differences between men and women psychologically, socially and sexually	6	6.70	12	5.70	3.40	9.70	3.90	-	-	32.30 (3.27) Second
	4) Effects of relationships with the other sex psychologically and socially	55	11	12	6	5	8.90	2.10	-	-	2.29 (1.18) First
	5) Sexually transmitted diseases	57	8	12	5	3.40	11	3.40	-	-	32.60 (3.56) Third
	6) Examples of sexual abuse and ways to prevent it	56	7.80	12	5.70	3	11	4.40	-	-	2.42 (3.58) Fifth

\* The average number of people who have not prioritized this item knowledge towards addiction, \*\* The average number of people who have not prioritized this item knowledge towards sexual behavior

the present study are consistent with the findings of the above studies. Moreover, the results of the present study showed that the first priority in the attitude toward addiction in girls was the item that "alcohol consumption, drugs and smoking as a way of forgetting problems". Attitudes toward drug use are among other intrinsic factors. Adolescents who believe that drug use is more useful than harmful and hold a positive attitude towards it are at a higher risk of getting addicted.<sup>[9]</sup> Also, the results of this study showed that the first priority in the attitude of sexual behaviors was that "the parents' bedroom should be separate from that of children", which was reported by adolescents as their most important concern about sexual behaviors. In fact, the adolescents in this study did not have a good view of their parents' sexual relationship and children's bedroom unity with their parents. Accordingly, it is important to increase children's knowledge and make a change in parents' attitudes towards the sexual education of their children.<sup>[24]</sup> Therefore, considering that the first condition for changing behavior is change in attitude of parents, it is suggested that plans should be designed and implemented by ministry of education for the prevention and reduction of addiction and sexual deviations based on the needs of children. Moreover, the results of the study showed that the first priority in the domain of performance towards addiction in girls was

"learning the skills needed for the control of excitements". Studies have shown that excitement seeking in adolescents lead to inclinations toward drug abuse, early and high-risk sexual behaviors, poor interpersonal relationships, and delinquent behaviors. According to these studies, excitement control skills should be taught by schools and parents.<sup>[25]</sup> Therefore, learning the skills needed for the control of excitement is one of the priorities of girls, especially when exposed to excitements such as alcohol, drugs, or sexual relations leading to the sexual transmitted diseases.<sup>[26]</sup> The results also revealed that the first priority in the domain of performance towards sexual behaviors in girls was "proper performance in case of sexual behaviors" which was reported as the most important concern about sexual behavior. According to a study conducted on 735 girls aged 15-19, the half of the girls were sexually abused, which was imposed by the opposite sex and not willingly done.<sup>[27]</sup> In fact, the results of this study and other studies indicate that adolescent girls need proper performance and training in the face of sexual harassment.

The refusal of some school principals to cooperate in the research process was one of the major problems in the research implementation, which required a great deal of time and effort to justify them by explaining the goals of the researcher. Also, people's attitudes toward sex may

**Table 3: Frequency distribution of the self-care needs priority in the domain of attitude toward addiction and sexual behavior in the subject**

The domain	Phrase familiarity with the:	Priority									Mean (SD) order
		1	2	3	4	5	6	7	8*	9**	
Attitude towards addiction	1) Quitting alcohol addiction is not easy	22	5.30	2.66	7	3.10	0.20	22	3	-	4.10 (2.33) Fourth
	2) Smoking affects drug addiction	22.7	4	2.16	7.30	3	1.44	1.69	2.80	-	14.20 (2.78) Fifth
	3) One-time use of the drugs addicts' people	30	6.50	2.55	6	2.90	8.60	16	4.40	-	83.90 (4.87) Second
	4) Drugs are effective in forgetting the problems	3.91	4.20	14	23	3	9.40	3.50	8	-	3.76 (2.43) First
	5) Drug use is a sign of a person's higher personality	14	3	43	10	5	11	10	4	-	5.10 (4.31) Seventh
	6) Vitalizing substances do not have a negative effect on the body	28	4	30	8.40	3	9.20	13.90	3.40	-	4.16 (3.12) Sixth
	7) Smoking hooks have less complications than cigarettes	31	6	27	7	3	10	12	3.40	-	4 (2.87) Third
Attitude towards sexual behaviors	1) Diagnosing sexually transmitted diseases can only cause anxiety	4.20	8	3.70	2.30	3	7	16.70	15	4	3.45 (1.89) Second
	2) I refuse to talk with my parents and teachers about the sexual issues due to its embarrassment	4.70	7	4.70	3.40	1	7	13.40	19	3.70	3.682(3.4) Fourth
	3) I have a friendship with the opposite sex for better understanding of them	30	5	6	2.80	5	11.50	13	22	4.10	4.25 (2.56) Sixth
	4) Knowing the function of the genital system is useful for a girl	43	6	4	2.60	4.90	10	10.90	13	5.30	43.90 (4.36) Third
	5) I will remain silent if exposed to sexual harms	3.17	5.20	3.90	4.20	5	6	7	2.66	5	24.70 (4.51) Seventh
	6) The parents' bedroom must be separated from that of children	58.30	5	2.90	0.80	2.30	5	8.70	12.50	4.70	92.30 (5.89) First
	7) Discussing the sexual issues of daughters is the same with mother and friends	3.49	6.70	5	3.90	4.20	8.60	12	17	4.20	73.40 (3.66) Fifth

\*The average number of people who have not prioritized attitude towards addiction, \*\*The average number of people who have not prioritized attitude towards sexual behavior

**Table 4: Frequency distribution of self-care needs priority in the domain of performance toward addiction**

The domain	Phrase Familiarity with the:	Priority					Mean (SD) order
		1	2	3	4	5	
Performance towards addiction	1) Learning the skills necessary fo the control of excitement	53.80	7.80	1.69	2.90	12.80	62.90 (3.49) Fifth
	2) The need to know the proper performance to stay away from addiction	39.20	8.60	23	5.50	2.60	52.10 (4.52) Third
	3) Learning the skills necessary to say "No" and refuse friends' drugs suggestion	46	8.40	17.80	7.80	16.70	2.57 (13.28) Fourth
	4) The need to know the proper behavior if you suspect drug abuse in friends	4.20	15.10	15.70	7.10	16.20	32.90 (4.29) Second
	5) The need to know the proper performance (referring to the school mentor) if you have symptoms such as anxiety, depression and low self-confidence	47	11.70	17.80	4.70	15.90	1.87 (0.65) First
Performance towards sexual behaviors	1) Appropriate action if you have sex	70.20	5	8.60	2.60	11.20	2.32 (1.54) Fourth
	2) How to wash the genitals after urination and defecation	53.80	10.70	12.30	2.90	1.63	2.17 (2.87) Second
	3) How to observe individual hygiene during menstruation and travel	5.77	8.60	12.80	2.90	15.10	2.18 (1.75) Third
	4) The need to learn the skill of saying "No" to the unsafe behaviors and demands of strangers	59.50	6.30	11.70	4.70	1.64	2.38 (1.53) Fifth
	5) Proper performance in sexual behavior the need to gain the ability to say no to the incestuous demands (relatives)	54.60	6	11.70	5.20	1.69	2.22 (1.62) First

be influenced by culture and religion. But in this study, culture and religion have not been addressed. One of the limitations of the present study was that the researcher could not use open-ended questions for questionnaires and obtaining information from students.

## Conclusion

Based on the results, more effective interventions are recommended through the training of self-care needs in adolescents to protect the adolescents from being involved in substance use and sexual harmful behaviors. It is also suggested that the teachers and parents help to promote adolescent education. This can be achieved only if the results of this study can be used to promote sexual health and substance use behaviors in schools as schools and education authorities are sensitive to the policy-making and prevention of high-risk behaviors in students.

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## Conflicts of interest

Nothing to declare.

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