

# The Study on the First Year Students of the Faculty of Medicine to Assess Their Health Compromising Behaviors and Knowledge About Reproductive Health

## Tıp Fakültesi Birinci Sınıf Öğrencilerinin Sağlığı Riske Atan Davranışlarının ve Üreme Sağlığı Konusundaki Bilgi ve Tutumlarının Belirlenmesi

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**ABSTRACT Objective:** The aim of this article is to assess how well the students in the first year of the Mersin University Faculty of Medicine, as a section of adolescents, are informed about the adolescent and reproductive health and, to examine adolescents' health compromising behaviors. **Material and Methods:** The material comprised of 88 students in the first year of the faculty of medicine. Data was collected through questionnaires completed by the students. **Results:** Females were more inactive than males. The ratio of males (78.6%) who reported having participated in physical activities was higher than females (40.6%). Most adolescents reported that they had never smoked (64.8%), never used alcoholic drinks (54.5%), and never used drugs (97.7%). The majority of adolescents reported that they had never had sex (79.5%). The ratio of using contraceptive methods in the first sexual intercourse was 25%. Most of the males (55.4%) and females (74.2%) reported that their knowledge about reproductive health was not enough. The general knowledge of the females about the adolescent health and reproductive health was better than those of males ( $p=0.039$ ). **Conclusion:** Among adolescents in the first year of the faculty of medicine, risky behaviors are common and adolescents' knowledge about adolescent and reproductive health is insufficient. Educational programs are needed to inform the adolescents about the adolescent health and reproductive health, and to prevent the health compromising behaviors.

**Key Words:** Adolescent, health behavior, reproductive health

**ÖZET Amaç:** Bu çalışmanın amacı, adolesanların bir kesiti olarak Mersin Üniversitesi Tıp Fakültesi birinci sınıf öğrencilerinin adolesan sağlığı ve üreme sağlığı konusundaki bilgi düzeylerinin ve sağlık açısından risk oluşturan davranışlarının belirlenmesidir. **Gereç ve Yöntemler:** Çalışmaya 88 birinci sınıf öğrencisi alınmıştır. Anket formlarının her öğrenci tarafından tek başına yanıtlanması sağlanarak bilgiler toplanmıştır. **Bulgular:** Kızlar erkeklere göre daha hareketsiz bir yaşam sürdürmektedir. Spor yapma yüzdesi erkeklerde (%78.6) kızlara göre (%40.6) daha yüksek bulunmuştur. Adolesanların büyük bir kısmı sigara içmeyi denemediklerini (%64.8), alkollü içecek kullanmadıklarını (%54.5) ve uyuşturucu madde kullanmadıklarını (%97.7) ifade etmişlerdir. Düzenli alkol ve uyuşturucu madde kullanma oranlarında kızlar ve erkekler arasında istatistiksel olarak fark olmadığı saptanmıştır. Adolesanların çoğu hiç cinsel deneyimlerinin olmadığını bildirmişlerdir (%79.5). İlk cinsel ilişkileri sırasında kontrasepsiyon yöntemi kullanan erkeklerin oranı %25'tir. Cinsellik konusunda erkek öğrencilerin %55.4'ü kız öğrencilerin %74.2'si bilgilerinin yetersiz olduğunu düşünmektedir. Adolesan dönemi ve üreme sağlığı konusunda kız öğrencilerin erkek öğrencilere oranla genel olarak daha fazla bilgiye sahip oldukları bulunmuştur ( $p=0.039$ ). **Sonuç:** Tıp fakültesi birinci sınıfındaki adolesanlar arasında sağlık açısından risk oluşturan davranışlar yaygındır; adolesanlar kendi sağlıkları ve cinsellikleri konusunda bilgilendirmek ve sağlık açısından risk oluşturan davranışları önlemek için eğitim programlarına gereksinim vardır.

**Anahtar Kelimeler:** Adolesan, sağlıklı ilgili davranışlar, üreme sağlığı

Adolescence is a stage of human life in which growth and development rates are fairly rapid. This period is between childhood and adulthood, and it is an important time of growth and transition. During that period rapid physical, sexual and psychological changes are observed. Additionally, during adolescence, individuals' life styles and social opinions come into existence and the human being strive to be an individual in the society and he/she make plans for the future.

Adolescent health is concerned with the behaviors and attitudes which are learned in the social and cultural environment the individuals live in. It was shown that the behaviors which were acquired during adolescent period affect adolescent health in negative or positive ways and that effect usually continues during the adulthood.<sup>1</sup> That's why the health compromising behaviors and attitudes gained in the adolescent period may affect human and community health negatively not only in this period but also in the later stages of life.<sup>1-4</sup>

Smoking, alcohol use, sedentary lifestyle and high risk sexual activities are the health compromising behaviors which are gained at the adolescent period but continue in the adulthood and lead to many chronic problems such as cardiovascular diseases and cancer.<sup>2,3</sup> That's why preventing the harmful and risk taking behaviors during the adolescence is important in order to protect both individual and community health in the future. Several factors, including educational performance and participation in extracurricular activities have been identified to affect adolescents' participation in health-compromising behaviors.<sup>4</sup> Especially in the studies about education, it has been shown that as the education level decreases, tendency of adolescents to the high risk and harmful attitudes and behaviors such as smoking increases.<sup>5</sup> So it is obvious that expectations of the adolescents' should be known to carry out educational programs for preventing health compromising behaviors.

Although adolescents are one of the big constituents of world population, they were among the groups which are neglected most, till recent years.<sup>6</sup>

The population of the adolescents is growing fast all around the world and in Turkey day by day, so their requirements and expectations about reproductive health should not be excluded in health programs. Today, one fifth of the world population is in 10-19 years age group. The population of the people in this age group is approximately 1.2 billion and, most of these people live in the developing countries.<sup>7</sup> Because of the early sexual activity and inadequate knowledge about reproductive health and contraception, adolescents are more exposed to the risk of sexually transmitted diseases and unwanted pregnancies.<sup>6</sup> In the studies from different countries it was found that adolescents' knowledge about health; especially about reproductive health was insufficient.<sup>8,9</sup> Similar to these studies, in Turkey it has been that the adolescents' level of knowledge about reproductive health is fairly low.<sup>10</sup> Incorrect beliefs and insufficient knowledge about sexuality are the major difficulties of informing youth for health practices and health compromising sexual activities-related risks.<sup>6</sup> Adolescents' level of knowledge about sexuality and reproductive health is closely related to the source where they obtain the information.<sup>8</sup> The primary education about sexuality generally begins in the family with parents.<sup>8</sup> So parents play an important role on the behaviors and manners of the adolescents about sexuality.<sup>8</sup> It is suggested that in the education of adolescents about reproductive and adolescent health, the educational process which begins in the family should be continued in the schools with educational programs.<sup>11</sup>

First grade students of the university, match the last years of the adolescence and beginning years of the youth. That is why they are one of the most suitable groups to find out the lifestyles and behaviors which are acquired during the adolescence. Since there is an immediate need to determine the knowledge and behaviors of adolescents according to the socio-demographic characteristics and to offer solution proposals to improve their health in the positive way, this study was designed. The purpose of this study is to find out how well the first year students of faculty of medicine are informed about health attitudes, their sources of in-

formation about reproductive health, how they expect to be informed about reproductive health and, their health compromising behaviors.

## MATERIAL AND METHODS

### DATA COLLECTION

The data were collected using a structured self administered questionnaire developed for the use of adolescent health program of International Children’s Center. The questionnaire was pre-tested on 20 first year students. After getting permission from the dean of the faculty of medicine, students were informed about the questionnaire and then they completed the questionnaire under the supervision of the researchers in a lecture time.

In this study, except gender, parents’ education status, where the students lived till 14 years of age and presence of health insurance, were accepted as independent variables. Their relations with the questions in the questionnaire were examined. SPSS 11.5 statistics pocket program was used to calculate Chi-square in convenient cross tables and Z test in order to compare two independent ratios. The results were considered statistically significant if p values were less than 0.05.

## RESULTS

The sample consisted of 88 students in the first year of the Mersin University Faculty of Medicine. Sixty four percent of the students were males and 36% of them were females. The mean age of the males was 19; mean age of females was 18. Only 12.5 % of the students were from rural areas, the others were from urban areas (town/city/abroad).

It was found that education level of the parents was higher in the female students’ group than those of male students’ group. All the parents of the female students were literate, on the other hand, 19.6% of mothers and 7.1% of fathers of male students were not literate. The proportion of the parents who had university degree was higher in female group than those of male group (Table 1).

When they were compared for health insurance, all of the female students had health insurance but 26.8% of male students had no health

**TABLE 1:** Distribution of the students according to gender and parents’ education.

Education status	Males		Females		Total %
	Number	%	Number	%	
<b>Mother</b>					
Illiterate	11	19.6	0	0.0	12.5
Literate	34	60.7	20	62.5	61.4
High school/University	11	19.6	12	37.5	26.1
Total	56		32		
<b>Father</b>					
Illiterate	4	7.1	0	0.0	4.5
Literate	35	62.5	15	46.9	56.8
High school/University	17	30.4	17	53.1	38.6
Total	56		32		

insurance. Besides, 72.2% of the male students’ parents and 27.8% of female students’ parents were officials. When the other health insurance systems were examined; the percentage of the students who had retirement fund or Bagkur (The security organization of artisans and self-employed) insurance was higher in female students group when compared to male students group. The percentage of the students with SSI (Social security institution) insurance was similar in both groups. Although 3.6% of male students were green card holders, none of the females had a green card (Table 2).

The students were asked how they qualified their economic status. When the answers of the

**TABLE 2:** Distribution of students according to gender and health insurance.

Health insurance	Males		Females		Total %
	Number	%	Number	%	
No	15	26.8	0	0.0	17.0
<b>Yes</b>					
Official	13	72.2	5	27.8	20.5
Retirement fund	6	10.7	14	43.8	22.7
Social security institution (SSI)	13	23.2	7	21.9	22.7
Bagkur*	6	10.7	6	18.8	13.6
Green card**	2	3.6	0	0.0	2.3
Others***	1	1.8	0	0.0	1.1
Total	56		32		

\* The social security organisation for artisans and self-employed.

\*\* Health expenses of green card holders are paid by the government.

\*\*\* Health card from school (p= 0.0001).

students about their families' economic status were analyzed it was found that, socioeconomic status of the female students' families was higher than male students'.

The students were asked why they have been participating in physical activities. Physical activity term comprises both mild, moderate and severe exercise. Males were significantly more likely than females to participate in physical activities (78.6% vs 40.6%) (Table 3). The proportion of the female students participating physical activities was less than 50%, and that result was independent from their parents' education status and where they lived before.

In Table 4 it was shown that there was a significant difference between males and females for regular smoking (individuals who smoke everyday) ( $p= 0.004$ ). The proportion of the ones who reported that they were smoking regularly was 5.4% in males, 0.0% in females. There was no significant difference by gender for regular alcohol use (drinking alcohol more than four times a week).<sup>12</sup> ( $p= 0.135$ ). It was observed that there was no statistical difference between males and females for life time drug abuse (nontherapeutic use of narcotics and stimulants) ( $p= 0.691$ ). One point eight percent of males and 3.1% of females reported that they had used illicit drugs.

In Table 5 it was shown that the ratio of the males who reported that that they had been masturbating was higher than ratio of females ( $p= 0.001$ ). The percentages of the males and the females who reported that they did not know the meaning of masturbation were respectively 18.8% and 14.5%. There was no significant difference between two groups for that subject ( $p= 0.445$ ). Total ratio of the adolescents who did not know the

**TABLE 3:** Distribution of students according to gender and having participated in physical activities.

Participating in physical activities	Males		Females		Total
	Number	%	Number	%	
No	12	21.4	19	59.4	35.2
Yes	44	78.6	13	40.6	64.8
Total	56		32		

**TABLE 4:** Distributions of students according to gender and smoking, alcohol use and drug abuse.

Smoking, Alcohol use, Drug abuse	Males		Females		Total
	Number	%	Number	%	
<b>Smoking</b>					
Never smoked	31	55.4	26	81.3	64.8
<b>Smoked</b>					
Tried once	6	10.7	5	15.6	12.5
Smoked before, gave up	8	14.3	1	3.1	10.2
Smoke occasionally	8	14.3	0	0.0	9.1
Smoke regularly	3	5.4	0	0.0	3.4
Total	56		32		
<b>Alcohol use</b>					
Never used	31	55.4	17	53.1	54.5
<b>Used</b>					
Tried once	4	7.1	4	12.5	9.1
Used before, gave up	5	8.9	7	21.9	13.6
Drink occasionally	16	28.6	4	12.5	22.7
Drink regularly	0	0.0	0	0.0	0.0
Total	56		32		
<b>Drug abuse</b>					
No	55	98.2	31	96.9	97.7
Yes	1	1.8	1	3.1	2.3
Total	56		32		

**TABLE 5:** Distribution of students according to gender and masturbation practise.

Masturbation	Males		Females		Total
	Number	%	Number	%	
Yes	33	60.0	1	3.1	39.1
No	14	25.5	25	78.1	44.8
Don't know the meaning	8	14.5	6	18.8	16.1
Total	55		32		

meaning of masturbation was 16.1%. When these data were analyzed for the parents' education status there was no significant difference. There was no significant effect of the places where the students came from to the percentages of the students who knew the meaning of masturbation.

The ratio of the students who reported that they had never made sex were 71.4% in males and 93.8% in females. Since none of the female students reported sexual intercourse; the age at which females' sexual intercourse began was indefinite, on

the other hand first sexual intercourse age was 16 in males. Seventeen point nine percent % of the males reported sexual intercourse. Fifty percent of those adolescents reported sexual intercourse with their boy/girlfriends and 25% of them had it with a stranger in exchange for gift or money. The rate of the females who reported sexual intercourse was 0.0%. The percentage of the males reported that they had used condom at their first sexual intercourse was 12.5% (Table 6).

In this study it was found that female students had more knowledge than males about reproductive health ( $p= 0.039$ ). Seven percent of males and 37.5% of females reported that they did not know where the semen was produced. The ratio of the adolescents who did not know the content of the semen was 10.7% in males and 31.3% in females. The percentage of the males who reported that they had no knowledge about time to become pregnant was 25%. This percentage was 16.1% in females. There was no statistical relation between the answer of these questions and the educational level of the parents of the students and the students' homeland.

The ratio of the adolescents who reported that condom should be used to prevent sexually transmitted diseases was 65.6% in females and 80.4% in males. Fourteen percent of males and 34% of females had no knowledge about that subject. However 92% of males and females reported that they had equal responsibilities for protecting themselves from sexually transmitted diseases. Additionally it was found that the ratio of adolescents who had knowledge about the day after pills was similar in males (58.1%) and females (67.9%).

In Table 7 the proportion of the adolescents who reported that masturbation was harmful to health or had no idea about masturbation was very high. There was no significant relation between the parents' education status and the answers of the adolescents for that question.

Fifty five point four percent of male students and 74.2% of female students reported that their knowledge about sexuality was not enough (Table 8). It was found that main sources of the students' knowledge about sexuality were primarily books and encyclopedias (58.2% in males,

**TABLE 6:** Distribution of the students according to gender and sexual activity.

	Males		Females		Total %
	Number	%	Number	%	
<b>Ever had sex</b>					
No	40	71.4	30	93.8	79.5
Yes, without intercourse	6	10.7	2	6.3	9.1
Yes, with intercourse	10	17.9	0	0.0	11.4
Total	56		32		
<b>The one who they had first sexual experience with*</b>					
Girlfriend/boyfriend	8	50.0	0	0.0	44.4
Someone acquainted, without money	4	25.0	0	0.0	22.2
Someone foreign, for money or gift	4	25.0	0	0.0	22.2
Total	16		0		
<b>Contraceptive use in the first sexual experience*</b>					
No	12	75.0	0	0.0	66.7
Yes					
Coitus interruptus	2	12.5	0	0.0	11.1
Condom	2	12.5	0	0.0	11.1
Total	95		20		

\* Percentages are calculated over the ones who had sex.

**TABLE 7:** Distribution of the students according to gender and their opinions about masturbation.

Masturbation	Males		Females		Total
	Number	%	Number	%	
Useful to health	31	55.4	3	9.4	38.6
Harmful to health	11	19.6	8	25.0	21.6
No opinion	14	25.0	21	65.6	39.8
Total	56		32		

**TABLE 8:** Distribution of students according to gender and their level of knowledge about sexuality/reproductive health.

Knowledges about sexuality	Males		Females		Total
	Number	%	Number	%	
Enough	22	39.3	4	12.9	29.9
Not enough	31	55.4	23	74.2	62.1
No knowledge	3	5.4	4	12.9	8.0
Total	56		31		

46.9% in females) and secondly television (50.9% in males, 50.0% in females). Although 53.1% of the female students were informed about sexuality by their mothers, the percentage of the male

students who were informed by their fathers was only 18.2% (Table 9).

Furthermore, female students reported that they wanted to be informed about sexuality by doctors (78.1%), mothers (37.5%), nurses-midwives (21.9%) and teachers (18.8%). Male students reported that they would like to be informed about sexuality by doctors (60%) teachers (30.9%), fathers (20%), and midwives-nurses(18.2%). The adolescents reported that they would like to be informed about sexuality mostly in the medicosocial centers of the universities (69%), and they also expected to attain therapy besides information there. They reported that they preferred to get that service mainly from doctors (90.8) and psychologists (89.7%). Nevertheless adolescents were fairly conservative (37.9%) for the gender of the staff who informed them about sexuality. Their opinion about gender of the staff was as “male staff for males, female staff for females” and the proportion of the adolescents who had that opinion was high. This opinion was similar both in males (38.2%) and females (37.5%) (Table 10). There was no evidence

**TABLE 9:** Distribution of the students according to gender and their origin of knowledge about sexuality /reproductive health.

Origin of the knowledges about sexuality*	Males		Females		Total
	Number	%	Number	%	
No knowledge	4	7.3	4	12.5	8
Mother	10	18.2	17	53.1	27
Father	10	18.2	6	18.8	16
Sister	1	1.8	7	21.9	8
Brother	6	10.9	2	6.3	8
Teacher	10	18.2	3	9.4	13
Doctor	9	16.4	2	6.3	11
Midwife/Nurse	1	1.8	1	3.1	2
Sexual partner	4	7.3	0	0.0	4
Elementary school	9	16.4	1	3.1	10
High school	21	38.2	13	40.6	34
University	12	21.8	0	0.0	12
Book/Encyclopedia	32	58.2	15	46.9	47
Television	28	50.9	16	50.0	44
Magazine	22	40.0	12	37.5	34
Pornographic publications/films	19	34.5	0	0.0	19
Friends	2	3.6	1	3.1	3
Total	55		32		87

**TABLE 10:** Distribution of the students according to gender and by which way they want to be informed about sexuality/reproductive health.

	Males		Females		Total %
	Number	%	Number	%	
<b>The way that students prefer to be informed about sexuality*</b>					
Don't want to be informed	4	7.3	1	3.1	5
Mother	10	18.2	12	37.5	22
Father	11	20.0	5	15.6	16
Sister	1	1.8	6	18.8	7
Brother	8	14.5	1	3.1	9
Teacher	17	30.9	6	18.8	23
Doctor	33	60.0	25	78.1	58
Midwife/Nurse	10	18.2	7	21.9	17
Sexual partner	12	21.8	2	6.3	14
Elementary school	10	18.2	2	6.3	12
High school	13	23.6	7	21.9	20
University	22	40.0	12	37.5	34
Book/Encyclopedia	18	32.7	11	34.4	29
Television	12	21.8	4	12.5	16
Magazine	7	12.7	3	9.4	10
Pornographic publications/films	7	12.7	0	0.0	7
Other (Specialists)**	1	1.8	0	0.0	1
Total	55		32		87

\* Percentages are calculated over "n" for each answer.

of association between that opinion and parents' education or the places where they came from.

## DISCUSSION AND CONCLUSIONS

When we analyze the demographic characteristics of the adolescents, it is seen that both the education level and the percentage of the parents who have health insurance are higher in the female students' group. This may be due to the fact that the families with high education level have higher tendency to send their daughters to university than the families with low education level. Additionally, socioeconomic status of the female students was higher than male students. It may be said that the families, whose socioeconomic status are low, prefer to use their sources for the education of their male children. Totally 17% of the students had no health insurance. This percentage is higher in an other study which was performed on the same population.<sup>13</sup> This may be explained with the regional socioeconomic status differences of the universities. Additionally, we included only stu-

dents of the faculty of medicine to the study on the other hand in the other study's study population comprised of faculty of science-literature and medicine. So that there may be socioeconomic differences between the students of the different faculties.

Males were significantly more likely than females to participate in physical activities. On the other hand, although most of the male students reported that they had been participating in physical activities, the frequency and the level of physical activities were controversial. The proportion of the adolescents participating in physical activities were higher in developed countries and lower in developing countries.<sup>13,14</sup> Our results were similar with the result of the studies from the developing countries.<sup>13</sup> Especially in the developing countries, there is a need to build up educational programs to canalize adolescents to sports and physical activities. However life style modifications on diet and physical activity was shown to be very effec-

tive on the prevention and control of adolescent obesity which is a worldwide health problem among adolescents.<sup>15</sup>

Adolescence is under the effects of both cognitive, sensorial and body developments and among them body development is dominant. Smoking and alcohol use are considered to affect the adolescents' sexual development and behaviors negatively.<sup>16</sup> In our study, the proportions of the current smokers (14.3%) and drinkers (22.7%) who reported that they have been smoking or using alcohol occasionally, were fairly high. Since adolescence is a critical time for the development or the abandonment of smoking behavior; reducing smoking prevalence among adolescents should be a national health priority. Erbaydar et al reported the percentage of current smokers among adolescents as 9.1% which was lower than our results.<sup>17</sup> On the other hand, Akcay et al found the frequency of current smokers as 30.6% among university students.<sup>18</sup> In the latter study the proportion of the smokers is higher than our study. This is probably due to the their study group. Their study included all grades of university students and the proportions of smokers were higher in the senior grades. The higher smoking proportions in the senior students may be the reason of that high proportion.

Alcohol use, particularly early use, has often been implicated to be connected with risky sexual behavior and risk behavior in general.<sup>19</sup> That is why these factors should be considered collectively in health interventions for adolescents. The prevalence rate for alcohol use was higher in another study which was carried out among the university students.<sup>20</sup> In that study, the alcohol use prevalence was higher among the students in the upper grades of the university. That is why educational programs should be put in order immediately to decrease the smoking and alcohol use proportions in the adolescent population. These educational programs may really be very important for the adolescent health. In our study, males (28.6%) were significantly more likely than females (12.3%) to report occasional alcohol use. This result is similar with the other studies which reported higher prevalence of alcohol use among males.<sup>20,21</sup> The findings of our

study may point to alcohol use among adolescents as a public health problem. Preventive measures to control alcohol consumption must include the adolescents, aiming to reduce the social cost of this abuse.

There is limited data about adolescent health and health compromising behaviors of the adolescents in Turkey. A study representing whole country was reported from Premiership Family Research Institution in Turkey in 1997.<sup>22</sup> In that study 57.3% of the adolescents reported that their knowledge about sexuality was inadequate. Besides in a study which was carried out in 32 high schools of Mersin in 1996 it was found that adolescents' especially the female adolescents' basic knowledge about menstruation, pregnancy, sexuality and reproduction was insufficient.<sup>10</sup> Similarly, in the other studies from different countries, it was found that the knowledge of adolescents about reproductive health was inadequate.<sup>23</sup> Especially in developing countries, high risk sexual behaviors are common among adolescents. One of the main reasons of this health compromising behavior is inadequate knowledge of the adolescents about the reproductive health.<sup>24</sup> As a result of high risk sexual behaviors, adolescent pregnancy is a major health problem in both developing and developed countries.<sup>25</sup> Effective counseling services may prevent unintentional pregnancies and sexually transmitted diseases.

All of those studies indicate that the general knowledge level of adolescents about sexuality and reproductive health is closely related to the sources of their knowledge. Parents are the first educators of the adolescents about sexuality and reproductive health. Besides, parents play an important role in the development of adolescents' behaviors and attitudes about sexuality.<sup>8</sup> So that the education levels of the parents is very important. One of the most striking results of our study was that; parents particularly the fathers whose educational level was low were unable to help especially the male adolescents for their education about sexuality. Chen et al showed that adolescents residing with both parents with high educational levels had higher healthy behavior scores in the dimensions



of health responsibility, nutrition and exercise.<sup>26</sup> These findings support the hypothesis of education level of parents is a significant variable affecting adolescent health-related behavior. Education of not only the adolescents but also parents may be useful to find solutions for most of the problems about adolescent health. Family is one of the main factors that could be influential in the development of adolescent attitudes about sex.<sup>27</sup> On the other hand talking about sex is a taboo area in many traditional Turkish families, with most of the older generation's having received insufficient reproductive health education themselves and not knowing how to approach the subject. Therefore, to enhance the positive influence of the family on adolescents' attitudes toward reproductive health, healthcare professionals should provide appropriate reproductive health education for parents who do not know how to engage children in discussion on the sensitive subjects about reproductive health.

With the results of this study it is obvious that adolescents knowledge about sexuality and reproductive health is not sufficient. This results is similar with the results of the studies about adolescent health in the literature.<sup>23,24</sup> On the other hand, with the help of the educational programs the sexual and reproductive health of the adolescents in the developed countries is better.<sup>28</sup> Although some of the female students were informed by their mothers, proportion of the male students informed by their fathers is fairly low. If adolescents are not informed by their parents and, sexuality and reproductive health is not discussed in their houses, it will be unavoidable for them to be informed from unreliable sources.

Reports of the World Health Organization about developing countries indicate that adoles-

cents usually prefer their friends and television to get information about sexuality and they prefer to be informed by different sources for the different aspects of the sexual health.<sup>6</sup> Incorrect beliefs and insufficient knowledge about sexuality are the major difficulties of informing youth about health practices and health compromising sexual activity related risks.<sup>6</sup>

Students are ready and willing to be informed by doctors and psychologists in the medicosocial centers of the universities. This fact should be taken into consideration by the administrators of the universities because it is very important for the adolescents' present and future health. It may be especially useful to organize educational meetings and seminars about sexuality and health for the first year students of the universities.

The results of our study shows that first year students do not have healthy lifestyles and they need interventions to adopt healthy behaviors. Additionally, their knowledge about reproductive health is quite insufficient. The reproductive health counseling should be provided by health care professionals and educational programs should be put in order. Since behaviors have already become habits in the university age group, preventive measures and educational programs to control health compromising behaviors must begin during the first years of the adolescence.

This study's limitations include reliance on self-report data and its relatively small sample size. Further researches on larger samples are essential to improve a preventive program on health compromising behaviors of the adolescents. These researches should take into account the specific cultural, social, behavioral, and economic characteristics of the adolescent population.

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