

Study of the Status of Risk Behaviors among Students of Tehran Universities

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Abstract

Objective: This study was designed to assess risk behaviors in students of Tehran universities. In this context, eight areas of high risk behaviors including unsafe behaviors, violence, suicide, smoking, alcohol consumption, drug abuse, and unhealthy eating behaviors and lack of physical activity have been studied.

Materials and Methods: The current study that is a kind of descriptive-analytic study has been done by the use of integration approach. The sample of this research involves 914 students from universities in Tehran, who were selected through cluster sampling. In order to collect the required information, the National Survey questionnaire on risk behaviors and risk behaviors of American students (NCHRBS) 2007 version was used. In the preliminary part of the questionnaire, the psychometrics characteristics and suitability for the Iranian population has been studied.

Results: The results of the findings have shown that the prevalence of risk behaviors among students was 26.4 % and it was higher in boys than in girls. Lack of physical activity with the frequency 73.6% was the most common risk behavior among students and after that were unsafe behaviors, unhealthy dietary behaviors, smoking, alcohol consumption, violence, drug abuse and suicide, respectively.

Conclusion: The results of the current study of the prevalence of risk behaviors and their priorities among the students, with access to the profile of high-risk behavior will help policy makers to identify more accurately the behavior patterns of students to design and develop health promotion programs, in addition to coordinate with real needs and challenges of this group.

Key words: Health, Risk behaviors, Students

INTRODUCTION

Health-threatening behaviors is one of the major social mental and health challenges that most countries in the world are involved in it, which has caused serious and widespread problems for societies (Center for Disease Control and Prevention¹, 2008 a). Despite many attempts, which has been made in the last two decades in order to raise awareness of the harm and danger of risk behavior,

we face the increase of these behaviors, especially among young people and adolescent.¹⁻⁵

According to the US Youth Risk Behavior Surveillance System² (2003), any behavior that threatens the individual's current or future physical or mental health is called high-risk behavior (Center for Disease Control and Prevention, 2004) and researchers believe that about half of early deaths in the United States is due to unhealthy personal behaviors (Glanz, Lewis, & Rimer, 1997; Eaton, Kann, Kinchen, Ross, Hawkins, et al., 2005; Center for Disease Control and Prevention, 2008b).

Previous studies reported higher prevalence of risk behaviors in the age group of 18 to 24 (Lindberg, Boggess and Williams, 2000; Ozer, Park, Paul, Brindis, Irwin, 2003; Youth Risk Behavior Surveillance System United States, 2005; Hsin-Li & Tsu-Hung, 2007; Zahran,

1 (CDC)

2 (YRBSS)

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Zack, Vernon-Smiley & Hertz, 2007). It is evident that universities are the best environment that consist the majority of this group; on the other hand it is a perfect place for educational and interventional planning to enhance individual health and to reduce and prevent risk behaviors (Kessler, 2004; Redican, 2004).⁶⁻¹²

According to the latest statistics provided by the Statistical Center of Iran about three million four thousand students in different educational levels are studying at universities of the Ministry of Sciences and Islamic Azad University (Iran Statistical Center, 2007). Students as one of the most important target groups for behavioral education are a large part of today's society in the country. So that the population ratio of this group increases the vulnerable potential of society in comparison to social problems (Student Health Association of America, 2004).

Before the 90s, there was not any widespread researches in the area of high-risk behaviors among students. The researches were mainly limited to sexual aggression and unwanted sexual relationship; as a result, little information is available in the area of alcohol, cigarettes and other drug abuse as well as high risk behaviors (Colbe, 1990; Douglas, Collins, Warren, Kann, Gold, et al, 1997; Fierros-Gonzalez & Brown, 2002).

In a national survey that was conducted in 1995 in the United States on student, the results revealed that the majority of students in the country are tended to behaviors that put them at risk of serious health problems. In this study based on the last 30 days, it has been reported that approximately 29% of students smoke, 34.5% consume alcohol, 27.4% drink alcohol while driving, and 30.5% use alcohol when swimming or boating (National Study of Student Health United States, 1995).¹³⁻²⁰

According to the Youth Risk Behavior Survey of India (2003), 25.5 % of high school students feel hopelessness, 16 % attempt a suicide, 10.6% never or rarely use their seat belts while driving, 93.8% rarely or never used helmet when riding a motorbike, 6.7% have been threatened or injured with weapons, 3.8% feel insecure to go to school, and 6.2% were reported for carrying a gun.

Lack of comprehensive information on the scope of unhealthy behaviors in students, the Center for Disease Control and Prevention (2007) decided to have an analytical research of the risk behaviors among students. CDC considered six categories of high-risk behaviors simultaneously in their study: 1) behaviors that lead to unintentional and intentional injuries, 2) smoking, 3) alcohol and other drugs, 4) unsafe sexual behaviors, 5) unhealthy nutritional behaviors and 6) physical inactivity. The results showed that education program which aims to

increase students' knowledge of health significantly reduce attending the incidence of such behaviors among them.

In order to accurate, realistic and effective planning to reduce and control high-risk behaviors, it is very important to get detailed statistics of these behaviors and to identify factors associated with them and individuals who are at the greatest risk involved in such behaviors (Zahran and et al., 2007). Measuring and evaluating the health threatening behaviors of the groups at risk, particularly among students, provide us with the valuable information about the incidence of these behaviors and their priority. This information enables us to progress education to the needs and everyday challenges of students and to coordinate the formulation, educational and prevention planning with special needs of these groups (Redican, 2004). As a result, this research was designed and implemented with the aim of checking the status of high-risk behavior in students of Tehran universities and in this context the eight areas of high risk behaviors including unsafe behaviors, violence, suicide, smoking, alcohol consumption, drug abuse, unhealthy eating behaviors and lack of physical activity.²¹⁻³⁰

MATERIALS AND METHOD

The study population consisted of male and female students in Tehran University in the academic year 1386-87 in one of the bachelor or master program. The sample is consisted of 914 students (511 girls and 403 boys), which were selected using multi-stage cluster sampling method. The age ranges between 18 to 43 years and their average age is 23/13. In this study, based on the objectives and the type of study, which is a kind of descriptive-analytic studies, correlation research method have been used. In order to gather information from high-risk behaviors and prevention of diseases control center (CDC) the 2007 version was used. This questionnaire in National College Health Risk Behavior Survey (NCHRB) was prepared and used each year in order to monitor these behaviors in students. This study covers eight areas of high risk behavior that operational definitions based on the questionnaire of the high-risk behaviors are:

- Unsafe behavior: including non-compliance with the safety issues while driving, motorcycling, cycling, swimming or rafting or sitting in other cars during the last 12 months
- Violence: having at least one physical fight or carrying hot or cold weapon at least once in the last 12 months
- Suicide: thoughts about ending the life and action to end the life at least once during the last 12 months
- Smoking: smoking at least one cigarette in the last 30 days or the regular use of it in the course of a lifetime
- Alcohol: drinking alcohol at least once during the last 30 days

- Drug abuse: taking a variety of drugs (cannabis, cocaine, crack, heroin, inhalants, steroids, hallucinogens, amphetamines, etc.) at least once during a lifetime
- Unhealthy nutritional behaviors: lack of consumption of fruits, juices, salads and vegetables or eating fast food or junk food during the last 24 hours
- Lack of physical activity: lack of any physical activity during the last week.

RESULTS

Based on questionnaires used in the current study, students are divided into four groups in terms of having high-risk behavior to “No risk”, “Low-risk”, “High Risk” and “At risk”. Figure 1 shows the position of the students in these groups.

As it can be seen, generally only 10.4% of the students are in the group of “No risk” and that 89.6% of them had experienced at least one type of risk behavior, of which the 49.5% are in “low risk”, 27.7% in “high risk” and 12.4% in “at risk” group.

Study of the prevalence of risk behaviors among students has shown that lack of physical activity with the frequency of 73.6% is the most common risk behaviors in this group. Suicide with a frequency of 4.3% in the study group had the lowest prevalence (Figure 2). After a lack of physical activity, the most prevalent risk behaviors among students are as the following order: Unsafe behaviors (46.4%), unhealthy nutritional behaviors (45.7%), smoking (37.2%), alcohol (17.3%), violence (16.7 %), drug abuse (9.8%) and suicide (4.3%).

The prevalence of risk behaviors, which is shown in Figure 2, details of the total student population and gender composition of it is not considered. From the data presented in Figures 3 and 4, the study and comparison

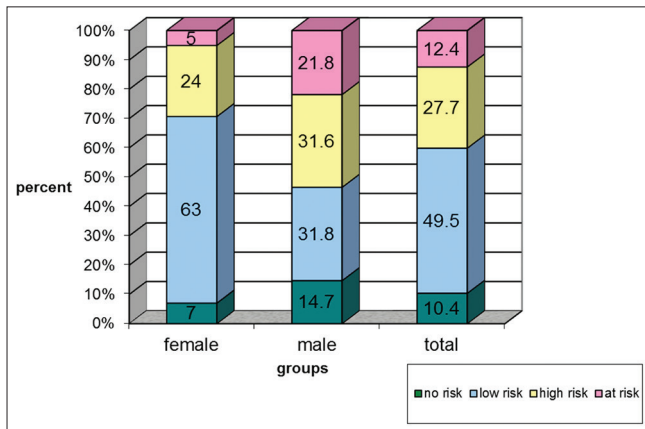


Figure 1: The prevalence of risk behaviors among students according to sex

of the prevalence of risk behaviors among both sexes is provided.

As you can see, the highest prevalence of high-risk behaviors (physical inactivity) and the lowest prevalence (suicide) is the same between girls and boys, while the other areas of prevalence of risk behavior among male and female students are of the different pattern. It means that the order of prevalence of other areas of high risk behavior in female students after the lack of physical activity is: nutrition, unsafe behaviors, smoking, violence, alcohol and drug abuse and suicide; And in male students after the lack of physical activity, the most risk behaviors are unsafe behaviors, smoking, unhealthy eating behaviors, alcohol abuse, violence, drug abuse and suicide, respectively.

Statistical analysis has shown that the difference between male and female students except on suicide was significant in other areas of risk behavior. It means the prevalence of risk behaviors among male students was often more than girls. But in the area of absence of physical activity opposite is true and the prevalence of this behavior in girls is more than boys.

DISCUSSION

In the present study the types of risk behaviors among male and female students of Tehran universities were examined and the results showed high prevalence of risk behaviors among students in a way that by 89.6% of them at least one type of risk behavior has been reported. However, the high prevalence of high-risk behaviors such as lack of physical inactivity and unhealthy nutritional behaviors has increased overall risk behaviors among college students, but what should be considered is that all these behaviors regardless of the type and severity of put people’s present or future health in danger and therefore are highly important. On the other hand in the interpretation of the overall scores of risk behaviors among individuals and the placement of each individual in different categories, some considerations are required. For example, the score of a person who drinks alcohol, smokes cigarettes and drugs, has attempted suicide and has aggressive behavior in record, may be the same with someone who does not have any of the above behaviors but in terms of nutritional unhealthy behaviors and lack of physical activity has high scores. So it is better data related to risk behaviors be discussed both alone and in comparison with each other.³¹⁻³⁴

Since the questionnaire used in this study considers the spectrum of intended risk behaviors to the attempts of these behaviors in general grading, the announced percentage for the prevalence of risk behaviors among students should be

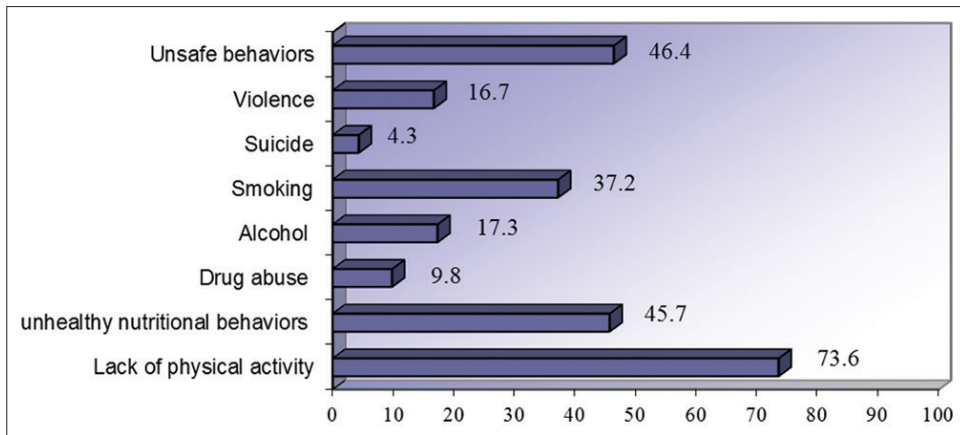


Figure 2: The prevalence of risk behaviors among students

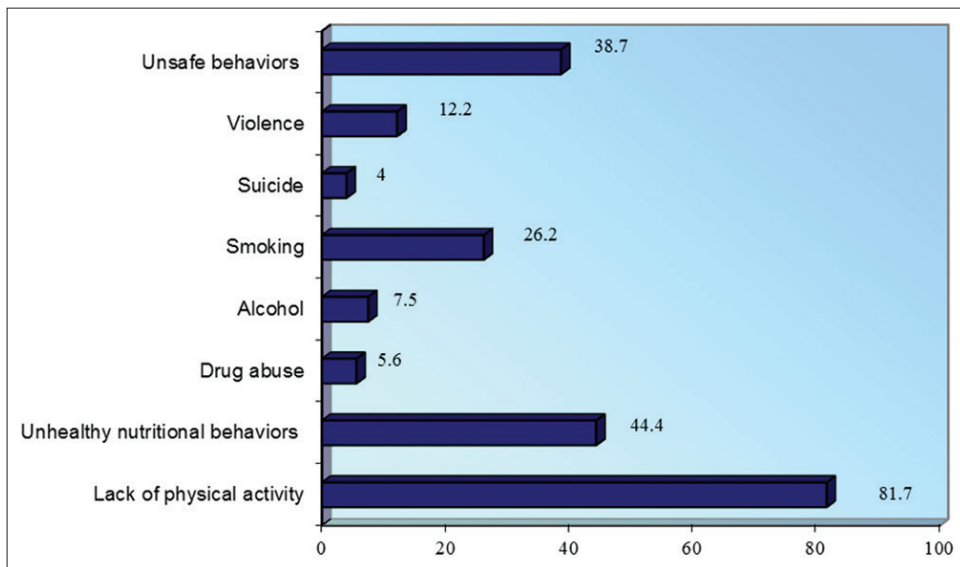


Figure 3: The prevalence of risk behaviors among female students

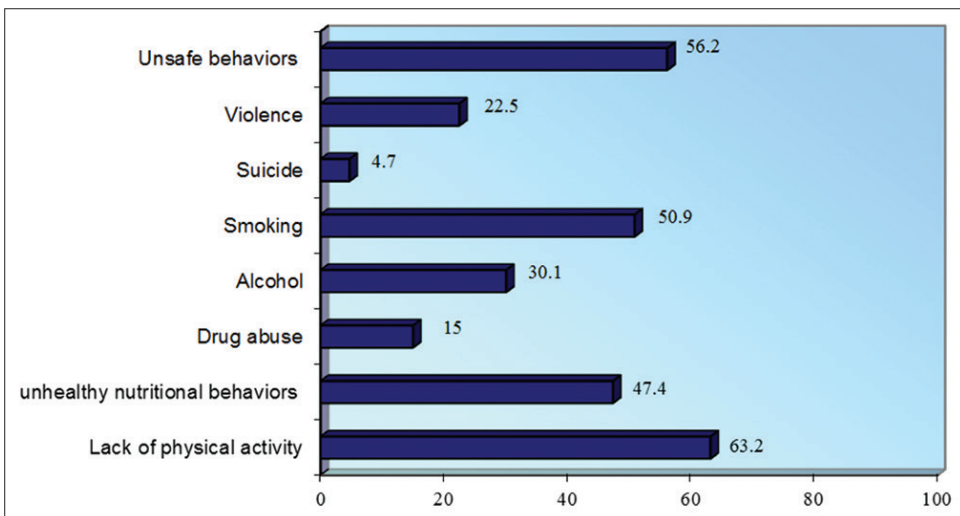


Figure 4: The prevalence of risk behaviors among male students

interpreted with caution. In addition, operational definitions provided to each of the areas of high-risk behavior should also be considered in their interpretation. For example, if the research findings proclaims the prevalence of smoking in students is 37.2%, it does not necessarily mean that the students are true smokers. But according to the operational definition given in the field, we must say that 37.2% of students smoked in the last 30 days or have had at least a regular cigarette consumption period in the course of their lifetime. Or even the prevalence of 16.7% incidence of violence among students mean that this amount of students have had at least a physical confrontation once during the last 12 months or have carried a cold or hot weapon.

The findings consistent with other researches done in the field of high-risk behaviors (World Health Organization, 2003; Sharma, Grover, Chaturvedi, 2007; Oltedal & Rundmo, 2006; Soleimaninia, 2009) has shown that the overall prevalence of risk behavior in boys is more than in girls is that have been observed in subset of high risk behavior except in physical activity. This, however, represents the priority of intervention in male group, due to the close distance of tendency to the high-risk behavior in girls and boys on the one hand (Fisher, Cullen & Turner, 2002) and fading greater gender discrimination in both industrialized and developing societies (Morocco, Runyan, Bowling, & Earp, 2007) on the other hand, attempt in planning for reduction and prevention of risk behaviors in girl students beside boys seems important and necessary.

Based on the results, unhealthy eating habits and lack of physical activity among students is of high prevalence, but despite the fact that numerous studies proving their importance in the future of individuals health and society (Sylvia, 2004; McKenzie, Li, Derby, Webber, Luepker and others, 2003; Key, Schatzkin, Willet, Allen, Spencer et al., 2004; Neumark-Sztainer, Story, Hannan, Perry & Irving, 2002; Van Duyn & Pivonka, 2000) little attention in the authorities has been receive. So that in most policies to reduce or control risk behaviors, those of smoking, alcohol and other substances abuse are emphasized. It is therefore essential that in planning health promotion to consider improvement of nutrition behavior and physical activity. It should also be noted that physical inactivity is more frequent in girls and there must be a remedy in this case.

Other issues that need planning in the field is the establishment of a regular assessment system and monitoring possibility and control of health-related behaviors in different groups of society. As noted in previous studies, in most countries surveillance system on risk behaviors in different groups including teens, youth, students and has been established and the measurement of the behavioral pattern differences is done annually,

thus it will lead to facilitating programs for reducing and preventing high-risk behavior. Therefore, the necessity of regular researches in Iran could be mentioned.

CONCLUSION

Finally, the high rate of high risk behaviors among young people, especially students, and the good educational potential provided in campus community, educational planning in order to reduce and prevent risk behaviors and encourage students toward healthy behaviors and promotion of health seems essential. And in this regard results (Center for Disease Control and Prevention, 1997; Pate, Trost, Levin & Dowda, 2000; National Center for Injury Prevention and Control, 2004) have shown that a combination of training, changes in the environment of people reformation, laws and other measures to change behavior and reduce risk factors have an important role in preventing risk behaviors.

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