

Evaluation of Type of Adolescents' Beliefs about Harmfulness Addictive Drugs and the Role of Education in Changing their Opinion (Health Belief Model)

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Abstract

In this semi-experimental study, general knowledge of 60 high school students about different kinds of drugs was assessed by a 60-question test. Four 45-minute training session was held for the effects, side effects and treatment methods of drugs. Their general knowledge was re-evaluated at the end of this course. Data analyzed with t-test. The accurate general knowledge of the groups about drugs did not exceed 50%. No significant difference was observed between the experimental female and male groups. Through a short-time training course, the level of the false knowledge of the students can be decreased and the level of their accurate knowledge can be increased.

Keywords: Health belief model; Drugs; Adolescence

Introduction

According to the Health Belief Model, unsafe behavior can be caused by lack of belief of a person in the harmfulness and dangerousness of drug consumption. False knowledge and information acquired from the environment about unsafe behavior is considered as the cause of the lack of belief in the existence of such behaviors. Hence, in addition the satisfactory effects of prohibited and allowable drugs, the addiction they cause, and the long period between their consumption and its side effects, one of the reasons of consuming these drugs is the false information that exists about their usefulness and satisfactoriness [1]. In a research conducted on the consumers of heroin in three Spanish cities (2006) it was indicated that, on average, 64% of the addicts had limited information on the risk factors and side effects of heroin [2]. Another study that was conducted on university students, who consumed psychiatric drugs, showed that 57.1% of the consumers of stimulus drugs and 33.2% of the consumers of sedatives (such as Benzodiazepines) took their drugs without medical prescriptions and without having enough information on their side effects [3]. Another research suggested that 39% of university students took psychiatric drugs to treat their pains, and sleep and stress problems based on their own diagnoses [4]. Another study performed in this regard showed that 31% of the university students that received medication for their attention deficit disorders abused the prescribed drugs [5]. Examination of pharmacy students indicated that 8% of these students abused narcotics and 7% of them abused stimulus drugs without prescription [6]. The studies carried out for controlling the pain of patients with acute diseases (such as cancer) shows that 46% of the patients and their nurses do not have accurate information about the amount and duration of using narcotics to pain control [7,8]. The results of a study performed on the rural students of Yazd Province implied that male students had the highest level of knowledge about opium, heroin, and marijuana. 70.2% of the students had encountered an addict throughout their lives and 17.5% of them had been offered with drugs by their friends. In addition, the mean knowledge of the families with at least one addict (7.1%) about drugs and alcohols (13.86 ± 8.6) was significantly more than that of the families with no addicts [9]. Furthermore, the studies prove the positive effect of training in side effects, risks, and treatment methods of drugs on changing the existing attitude and tendency toward drug consumption [10-12].

In the recent preventive programs, giving awareness is not considered solely as an effective means. These programs consider preventive plans and teaching rejection skills as the means that should be used along with training. In this regard, a study that was carried out in Mashhad on the implementation of preventive and psychiatric programs for high school students showed that the capability of the students and their skill to handle stressful situations can be enhanced by providing them with accurate information about the effects that drugs leave on daily life, teaching them to cope with different situations, reinforcing critical-thinking-related skills, and increasing their self-confidence [13]. Swift et al. proved that teaching the skills of avoiding drugs and the ability to handle stress decreases the recurrence of drug consumption [14].

Based on the above researches and the emphasis put on the necessity of preventive measures in this study, the initial knowledge of high school students is first measured. Then a training course is started for providing information about drugs and re-evaluating the knowledge of the students. Therefore, the increase and decrease in the amount of accurate information can be measured. Moreover, the decline in the ignorance can also be measured with an aim to diminish the tendency toward narcotics by giving accurate information. The reason is that the researchers believe that people have wrong beliefs about drugs and most of the addicts and people do not have accurate information on drugs. The objective of this research was to examine the false knowledge of teenagers about different types of drugs and the role played by training in enhancing the knowledge of high school students about drugs.

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Method

In the research, semi experimental design with pretest-posttest control group was used. The primary objective of this research was to assess the beliefs (true, false, no idea) about the side effects and risks of different types of drugs (opium, heroin, alcohol, marijuana and nicotine) before and after providing general training in various types of drugs (to high school teenagers). The secondary objective of this research was the study of role of gender in this regard. The population of this study included all the male and female high schools students of Rafsanjan city. Of the 20 high schools, two were selected by random cluster sampling. Each group consisted of at least 30 subjects. The 60 (30 boys and 30 girls) from the two schools were selected randomly.

Exclusion criteria

The students and their parents should not have any important physical or psychological illnesses, should not belong to the lower class of the society, and should not have experienced any divorce or abandonment.

Training for the sake of this research: Training was compromised of four 45-minute sessions delivered by lectures or questions and answers about the following issues: 1) general causes of addiction, particularly in teenagers and the youth; 2) classification of the drugs available in the society in terms of their clinical symptoms, physical and psychological dependencies, and tolerance and treatment symptoms; 3) the available treatment methods; 4) the role and value of addiction prevention and the level of the success of addiction treatment; 5) complication and risks that addiction causes in body and soul; 6) the attitude of religion toward different drugs.

Means of data collection

A test with 60 questions concerning general knowledge of the subjects about five narcotics (opium, heroin, marijuana, alcohol, and nicotine) is also performed. The questions presented are in the form of true or false sentences about various kinds of drugs. Each subject should choose one of the following options in order to answer the questions: true, false, no idea. These questions, which include the common beliefs and expert opinions about different drugs and their satisfactory and unsatisfactory clinical effects, are prepared based on the opinion of several experts (psychiatrists and psychologists). The possibility of treatment, and the properties and risks associated with the drugs are also addressed by these questions. After preparing the questionnaire,

an experimental test was performed on 20 students. Each questionnaire could be marked with three grades: 1) the sum of true answers (accurate knowledge); 2) the sum of false answers (bad training); 3) the sum of "no idea" answers (lack of knowledge). After picking the samples and coordinating with the high schools, the students were asked to answer the questionnaires. Then, training began and the sessions were held once a week. At the end of the training course, the subjects were tested once again. Split-half reliability, as measured by the Spearman-Brown coefficient, was 0.81 for the general form. In order to verify the validity of the contents, the opinions of five psychiatrists and five psychologists were utilized. Furthermore, for verifying the visual validity of the questions and whether they are general or professional the opinions of 10 referees (employee, nurse, psychiatrist, and psychologist) were considered as well and thus the solely scientific and professional questions were omitted. The results were compared based for 3 types of grades (before and after training the control and experimental female and male groups) using the independent and dependent t-tests.

Results

The average age of the male group under study was 16.11 with a standard deviation of 1.3 and the female group was 15.9 with a standard deviation of 1.1. Mean of accurate information in before training of males was 28.75 that changed to 37.84 after training and this different was significant. In addition, mean of accurate information in before training of females was 29 that changed to 39.2 at after training and this different was significant (Table 1). There was no significant difference in the mean of false information in male group before and after training but false information in females were significantly decreased after training (Table 2). The mean score of misinformation for males group before training was 23.06, and after training was 13.31, and the difference was significant. In addition, the mean score of misinformation for females group before training was 22.86, and after training was 16.76, and the difference was significant (Table 3).

Discussion

According to the results presented in table 1, 30 out of 60 members of the male control group and 28.7 members of the male experimental group had accurate information on average. Similarly, 29 members of the female experimental group and 28.8 out of 60 members of the female control group had accurate information on average as well. In addition, the control and experimental groups did not differ significantly. Therefore, it can be suggested that the knowledge of none of the groups

		Minimum	Maximum	Mean	SD	T	P value
Male	Accurate information before training	17	46	28.75	8.11	4.68	0.0001
	Accurate information after Training	14	52	37.84	8.95		
Female	Accurate information before training	21	37	29	3.84	9.1	0.0001
	Accurate information after Training	30	50	39.2	4.61		

P<0.05

According to this table, mean of accurate information in before training of males was 28.75 that changed to 37.84 after training and this different if significant. In addition, mean of accurate information in before training of males was 29 that changed to 39.2 at after training and this different if significant

Table 1: Comparison of Accurate information before and after training in experimental group.

		Minimum	Maximum	Mean	SD	T	P value
Male	False information before training	1	24	7.96	5.92	0.75	0.45
	False information after Training	3	22	8.84	4.46		
Female	False information before training	5	11	8.53	1.87	7.91	0.0001
	False information after Training	1	8	5.30	1.6		

Table 2 shows the average of false information in males is no significant change before and after training but false information (bad tutorial) in females were significantly decreased after training

Table 2: Comparison of False information before and after training in experimental group.

		Minimum	Maximum	Mean	SD	T	P value
Male	False information before training	7	40	23.06	8.88	4.47	0.0001
	False information after Training	1	32	13.31	8.06		
Female	False information before training	14	32	22.86	4.16	3.820	0.001
	False information after Training	6	50	16.76	7.91		

P<0.05

According to Table 3, the mean score of misinformation for males group before training was 23.06, and after training was 13.31, and the difference is significant. In addition, the mean score of misinformation for females group before training was 22.86, and after training was 16.76, and the difference is significant

Table 3: Comparison of misinformation before and after training in experimental group.

about drugs exceeded 50%. Hence, training is considered necessary. This finding is consistent with the results of the research carried out in Iran Drug Control Headquarters in Khorasaan Province [15]. The aforementioned study indicated that training the students in drugs is necessarily required. In addition, these results are also consistent with the results of studies performed in three Spanish cities. These studies suggested that the level of accurate information on drugs is low and there is a need for training heroin addicts [16].

According to table 2, the level of the false information of the students (which roots in the common false beliefs and bad trainings in different types of narcotics, their complications and effects) shows that at the end of the training course, the level of false information acquired by female students decreases significantly while that of male students does not decline significantly. This suggests that boys are more resistant to education and are influenced by bad training more than girls train. The amount of the false information generally grows as the students grow up and enter the society. This information that is common in the society include following notions: 1) opium is useful for the treatment of blood sugar and blood pressure; 2) alcohol is not addictive like opium; 3) opium differs from alcohol in that it is not forbidden; 4) drinking a little alcohol is useful for health; 5) opium can be used for fun and not addiction.

According to the results shown in table 3, it can be said that the experimental female and male groups both yielded satisfactory results concerning the level of ignorance and the impact of training. After training, the level of ignorance decreased significantly for both female and male groups and the subjects managed to acquire more information that is accurate. This finding is consistent with results of the research conducted by Taherian et al. [13]. It is also consistent with the results of the study that managed to change the attitude (and awareness) of university students toward narcotics and their dangers and side effects during a two-week period [17]. It is also in agreement with another research that could decline the amount of alcohol consumption of university students by training, attitude alteration, and a one-year of follow-up [18]. However, the important point about the role and effect of training on teenagers is that these people show risk-seeking behaviors during their adolescence. Risk-seeking behaviors of the teenagers include alcohol, narcotics and drugs consumption and sexual interactions. Reasons such as anti-phobia dynamics, lack of self-confidence, the need for proving sexual identity, the pressure exerted by the peers, and reflection of the fancy of being all capable are considered as the causes of the risk-seeking behavior seen in teenagers. Anyhow, this risk-seeking characteristic suggests that acquiring information cannot solely decrease such behaviors [19]. Hence, training shall come with prevention. Moreover, training shall be carried out before adolescence.

Conclusion

Giving awareness to teenagers about the characteristics of different

kinds of drugs, their effects, complications, risks, the way they create dependency, and the success of their treatment is necessary due to the lack of adequate accurate information. However, it must be mentioned that training is more useful in changing the false knowledge of females (compared to males). Furthermore, training led to the growth of awareness of both groups. However, in order to determine whether this change of attitude is enough for teenagers or not it is necessary to perform more studies because teenagers are characteristically risk-seeking individuals. Training the teenagers in preventive, resistance, and rejection skills is also necessary besides giving awareness.

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