Original Article

Investigating the Effect of Health Promotion Programs on Smoking Cessation of the Adolescent and Youth in Tehran

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Introduction: Substance abuse is currently a crippling problem worldwide. The hindering effect it has upon the development and prosperity of each society has turned it into a serious threat. Due to the importance of the problem the current study was aimed to investigate the effect of health promotion programs on the smoking cessation of the adolescent and youth in Iran.

Methods: The current study was a quasi-experimental study. The target population consisted of the teenagers and the youth people of district 12 of Tehran City. The understudied cases were divided into intervention and control groups. Each groups included 20 participants. The researcher-constructed questionnaire was used for data collection. Data analysis was conducted using SPSS version 20.

Results: Analysis of Cognitive-Therapy Co-Variance and its Effect on Health Promotion Scores show that Mean Square in Pre-Intervention sample and follow-up was 7854.365 and 5632.845 respectively. Also in Post-Intervention and follow-up was 4785.123 and 2865.563 that show a significant relationship between the pre and post-intervention and follow-up scores. Mean Square in Post-Intervention and follow-up for Effectiveness of Health Promotion Programs on Smoke cessation with 39 degrees of freedom was 730.58 and 746.420. The Ancova results showed that the improvement in wrong beliefs is permanent.

Conclusion: Research findings revealed that onetime and recurrent health promotion programs have significant impacts upon smoking cessation of the teenagers and the youth. Since drug abuse is a motivational disorder, educational programs and improving the living condition for treating drug abuse is highly recommended.

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Introduction

Mental Health is one of the most important aspects of general health and plays a critical role in one's well-being. Mental health refers to optimal conditions in which one can foster their potential and capabilities, adapt to life tensions, and be a useful person for society (1). Regarding the prominence of mental health in the social and psychological development of teenagers and the youth on one hand, and a variety of factors influencing mental health, behavior change theories and paradigms can contribute effectively to the identification of factors that affect mental health and substance abstinence. One of the behavior change theories that explore both personal and environmental factors impacting one's behavior is the social-cognitive theory. A critical component of this theory is self-efficiency that is defined as one's belief in one's ability to manage a certain task. Self-efficiency is a determining factor in predicting the academic achievement of teenagers and the youth in different areas (2).

Social skills are a must for all; however, they are critically more important for teenagers who encounter new and challenging conditions. Family and society are two important contexts in which one's social skills can develop. Negative behaviors are the result of skill deficit, and positive behaviors are the result of skill reinforcement (3). Health promotion programs are currently run in schools throughout Iran and it is expected that mental health problems of teenagers and the youth are removed to some extent. Unfortunately, the effectiveness of health promotion programs in reducing risky behaviors, upgrading life skills, and academic stress is understudied in Iran. However, the efficiency and effectiveness of such programs in lessening and preventing drug abuse in schools of different countries are well approved (4).

On the whole, mentally healthy youngsters can manage adolescent problems and adapt to the changing conditions. In other words, mental health is better defined as having a positive feeling, successful adaptation, and decent behavior. Therefore, any criteria regarded as necessary for health must take both outward behaviors and internal feelings into account (5).

Social life skill development entails educating teenagers on how to refrain from smoking, providing them with appropriate strategies to lower drug abuse, as well as reducing the effects of academic problems of the teenagers and the youth such as depression, stress, anxiety, lack of self-confidence and motivation, etc (6). Drug smugglers have recognized that by creating a positive attitude toward substance, and by spreading wrong beliefs within the community, they can have a profitable consumer market. Due to the importance of the problem the current study was aimed to investigate the effect of health promotion programs on the smoking cessation of Iranian Adolescent and youth people.

Methods

The current study was a quasi-experimental research. Required data was gathered through the librarian method, and some critical statistics are mentioned. Primary resources were referred to for data mining. The statistical population of the present study consists of Adolescent and youth residents in district 11, Tehran City. The research-constructed questionnaire was applied for data collection. The understudied cases were divided into intervention and control groups. Each group included 20 participants.

The Levene test used for the analysis of the homogeneity of variances. Also, Kolmogorov - Smirnov test was used to assess presence of the normal of distribution in data. Also the descriptive statistics and Ancova test were used for data analysis. The α: 0.05 was considered as a statistical significant level. All analysis performed using SPSS Version 20.

Results

The mean and standard deviation of pre-intervention, post-intervention, and follow-up
scores of health promotion programs of both experimental and control groups are presented in table 1. It is revealed that the mean of health promotion programs in the pre-intervention period is higher than the post-intervention. Besides, those who were educated under health promotion programs, their dysfunctional attitude improved considerably following these programs. The mean and standard deviation scores of pre-intervention, post-intervention, and follow-up periods scores of health promotion programs in both experimental and control groups are presented in table 2. The mean of health promotion programs scores in the pre-intervention period was higher than the post-intervention. Therefore, for those who were educated, their health status has changed significantly following the implemented program. According to table 3, the results show that there is a significant difference between the pre-intervention and post-intervention and follow-up scores. Regarding the means of the two groups, it is concluded that health promotion programs reduce the scores of dysfunctional attitudes in Post-Intervention and follow-up periods. The difference demonstrates that educational programs led to a 45% and 56% difference in wrong beliefs scores of Post-Intervention and follow-up period respectively. It is found that the mean of wrong beliefs of the experimental group was significantly less than the control group. According to table 4, health promotion programs succeeded in reforming dysfunctional attitudes related to substance abuse among understudied cases. Also the analysis of co-variance results showed that the improvement in wrong beliefs is permanent.

Table 1. Mean and Standard Deviation of Pre-Intervention, Post-Intervention, and Follow-Up Scores of Dysfunctional Attitude in Both Groups

| Group               | N   | Pre-Intervention | Post-Intervention | Follow-up |
|---------------------|-----|------------------|-------------------|----------|
|                     |     | mean  | SD    | mean  | SD    | mean  | SD    |
| Experimental Group  | 20  | 78.56 | 18.24 | 58.36 | 15.45 | 56.63 | 16.75 |
| Control Group       | 20  | 78.12 | 24.15 | 79.45 | 22.78 | 82.26 | 18.26 |

Table 2. The Mean and Standard Deviation of Pre-Intervention, Post-Intervention, and Follow-up Scores of both Groups

| Group               | N   | Pre-Intervention | Post-Intervention | Follow-up |
|---------------------|-----|------------------|-------------------|----------|
|                     |     | mean  | SD    | mean  | SD    | mean  | SD    |
| Experimental Group  | 20  | 60.40 | 18.43 | 49.72 | 2.26  | 51.53 | 2.38  |
| Control Group       | 20  | 69.53 | 8.32  | 61.25 | 2.34  | 63.92 | 2.46  |

Table 3. Analysis of Cognitive-Therapy Co-Variance and its Effect on Health Promotion Scores of Post-Intervention and Follow-up.

| Time              | Stage            | Degree of Freedom (dg) | Mean Square | F   | P     | Effect Size | Power |
|-------------------|------------------|------------------------|-------------|-----|-------|-------------|-------|
| Pre-Intervention  | Post-Intervention| 1                      | 7854.365    | 80.920 | 0.001 | 0.852       | 1     |
|                   | Follow-up        | 1                      | 5632.845    | 46.758 | 0.001 | 0.456       | 1     |
Investigating the Effect of Health Promotion Programs on Smoking Cessation of the Adolescent and Youth in Tehran

| Group-Membership | Post-Intervention | Follow-up |
|------------------|------------------|-----------|
|                  | 1                | 1         |
|                  | 4785.123         | 2865.563  |
|                  | 40.862           | 22.789    |
|                  | 0.452            | 0.563     |
|                  | 0.457            | 0.469     |
|                  | 1                | 0.896     |

Table 4. Co-Variance Analysis for Effectiveness of Health Promotion Programs on Smoke cessation

| Time              | Stage                    | Degree of freedom (df) | Mean Square | F     | P      | Effect Size | Power |
|-------------------|--------------------------|------------------------|-------------|-------|--------|-------------|-------|
| Pre-Intervention  | Post-Intervention        | 39                     | 730.58      | 8.634 | 0.001  | 0.28        | 0.95  |
|                   | Follow-up                | 746.420                | 8.820       | 0.001 | 0.30   | 0.96        |       |

Discussion

If you are indifferent to the world and do not add to this world, it responds to you accordingly. There is no single truth. Everything is your perceptions and inferences. Each person interprets the world uniquely. Your emotions, fears, distress, unhappiness, and depression are based on your perceptions. How we perceive and react to life events is very important. Life skills are instruments through which we can move toward our values, interests, and priorities. Acquiring skills therefore can help us with achieving our goals which are based on our values, and religious, cultural, and moral beliefs. Besides, thinking skills and self-consciousness are even helpful for setting goals and choosing the way. Nowadays, substance abuse disorder and the unpleasant outcomes of that is regarded as one of the most important problems of general health all over the world. Regarding the personal, social, and economic consequences of substance abuse, preventive measures and economically efficient treatments are critically required. Medication therapy, psychological, and social interventions are the best interventions. However, medication therapy ranks the first in terms of effectiveness. Cognitive therapy is as well an effective way that is applicable for a wide range of problems.

Although cognitive therapy was found to help treat drug abusers, definitive judgment in this regard needs more studies over other different groups. Given the various factors causing addiction such as; personality disorders, the type, and intensity of psychological problems, family and social problems- which were not investigable in this study- generalization must be cautionary. As mentioned previously, once addicted people encounter challenging conditions, they are evoked to abuse substances, and gradually, they get addicted. Generally, cognitive processes including beliefs related to substance, dysfunctional attitudes, etc. play important roles in substance abuse and addiction. Considering the correlation between one's tendency to drug abuse and the emotional and motivational status of the smoker, it is suggested that systematic motivational treatments are applied primarily by psychologists, therapists, and researchers. Systematic motivational treatments ascribe most psychological problems including substance abuse to motivation disorder i.e. dysfunctional methods based on which one pursues his/her goals. Systematic motivational counseling seeks direct change in the motivational basis for abusing alcohol and other substances, and it mainly identifies and changes the features of the motivational structure of consumers through some ways other than medication so that emotional satisfaction is realized.
The life enrichment program is as well a method focused on reforming the motivational structure and supplementary to systematic motivational counseling. It helps drug abusers with improving their living conditions, living happier, and having control over their consumption as it focuses on reforming one's goal-seeking system, as well as his/her irrational beliefs. This method invites people to alternative entertainments to feel less in need of drug abuse. Since substance abuse is regarded as a motivational disorder and addicted people suffer from non-adaptive motivational structures, i.e. they feel desperate in pursuing their goals, they resort to the drug to compensate for this feeling. Life enrichment programs that regard happiness as the basic need of humans, intervene in the goal-seeking system of clients, assess the quantity, quality, meaning, and the concept of goals and their interrelationships to enhance the opportunity of achievement. They as well pinpoint alternative activities for substance abuse to create new motivations and drives. Needless to say, life enrichment programs are widely suggested for treating drug abuse.

In assessing other studies' results, Hayes & Bond (2003) compared the effects of medication therapy (MT), cognitive therapy (CT), and behavioral therapy (BT) for making teenagers reluctant to the substance. A significant difference was noticed in Post-Intervention drug-inclination scores of the four groups i.e. the MT, BT, CT, and the control group. There was a significant difference between each group's score and that of the control group in terms of inclination to the drug. It was revealed that the effect of MT was 17%, CT 52%, and BT 13%. In general, research findings endorse the effectiveness of MT, CT, and BT in lowering the inclination of youth to drug abuse (7). Research findings show that moderating negative temper can reduce the inclination to addictive behavior (8). According to cognitive psychology, irrational thoughts and beliefs leave a direct impact on temper. Those who are addicted to the drug have some irrational beliefs that make them more intolerant of failures and therefore negative feelings such as rage and grief (9).

**Conclusion**

The current study results revealed that onetime and recurrent health promotion programs can have an important role in the smoking cessation of teenagers and the youth. Since drug abuse is a motivational disorder, educational programs and improving the living condition for treating drug abuse is highly recommended.

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