



Investigating the Efficacy of Three Methods of Methamphetamine Addiction Prevention Training on the Knowledge, Attitude and Performance of Yazd University of Medical Sciences Employees

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Abstract

Introduction: The purpose was to compare three educational ways of drug abuse prevention, (including: Education/sending short messages and teaching booklets) and their impact on the knowledge, attitude and performance, concerning Methamphetamine users between the employees of YAZD Shahid Sadoughi University of Medical Science.

Materials and Methods: This is a profile-operational and kind of semi-experimental- interventional study. Two hundred and ten employees of 6 assistance section of Yazd University of Medical Sciences employees were selected through multi stage clustering sampling. A group of 210 people had 2 teaching sessions for two weeks. In this study, the accumulate tool is the trial questionnaire regarding Methamphetamine abuse Participants have completed the pre and posttest and after 3 months were divided to 3 groups for education. Therefore, with this study, we compared the educational effectiveness and sustainability of 4 educational methods: face-to-face training class, sending educational materials via SMS, Training through CDs and manuals.

Methods: The study included 20 patients with significant RRMS (McDonald 2017). Among them, 6 men and 14 women aged 19 to 51 years (median 34.2 ± 9.6 years) who underwent HDIT (R-Cph 200) followed by autoHSCT. The follow-up period ranged from 31 to 34 days (median 31.45 days). At both points of the study, the neurological status was assessed according to the Scripps neurologic rating scale (SNRS), the score on the extended Kurtzke disability scale (EDSS), MRI of the brain and spinal cord with contrast, the presence of spasticity in the paretic limbs according to the modified Ashworth scale (MAS).

Results: The result of research indicates that the sooner we tackle such educations since young age, the faster their approach will revise against addictive drugs. There wasn't a significant difference in gender between groups ($p > 0.05$). The participant's knowledge in none of educational steps (including attendance, durability and education with CDS, SMS and booklets) was significant. The durability stage participant attitude was significant and to compare with the first attitude test, the durability after 3 months increased. However, group's performance in durability stage and after education through CDS, SMS and booklets, was expressive and durability after 3 months increased. That none of the educational methods in the second stage of education could have a significant impact on changing people's attitudes, awareness and performance.

Conclusion: Preventive methods have improved individual's performance and attitudes, however, teaching with CDS, SMS, and booklets have improved individual's performance, it has had no effects on the knowledge, attitude and performance, individually.

Keywords: Education; Knowledge; Attitude; Performance; Addiction

Introduction

During the last three decades, the worlds encountered outrageous statistics regarding extensive drug abuse and specifically among youngsters and adolescents [2]. Investigating effective prevention methods, identifying effective drug and non-drug interventions and modern methods of prevention are the main concerns of researchers. The United Nations Office on Drugs and Crime recently reported that about 255 million people are consuming drugs and treatment demand is increasing around the world. Prevailing statistics indicate that almost 16% of Iran's drug abusers are less than 19 years old and 28% of them develop drug abuse between the certain ages of 20-24 [2]. The health ministry's deputy declares that the reason of adolescent's gravitation towards provocative drugs like Methamphetamine is, just the wrong conceptions.

Education and prevention are most important procedures of drug abuse conflict [4]. Evaluations state that 80% of the society population do not have enough knowledge about different types of addictive drugs [5].

Most culturally and linguistically diverse communities have limited knowledge of mental illness and negative effects of drugs and alcohol. Most reviewers have made some assessment of the number of studies within their acceptance criteria that were able to achieve behavior change and most concur that it is possible to change students' drug use behaviors to a certain degree through school-based programs [6].

Research results suggest that increasing knowledge can positively affect social distance, the more that people understand, and

the less likely they will be to distance themselves from someone with a mental illness or substance use problem [13]. There is a need for medical and mental health professionals to present a positive attitude toward patients with alcohol and substance abuse problems [8]. The results of the study on student nurses at St. John's University indicated that students who participated in an alcoholism education program had an overall more positive attitude toward alcoholism than those who did not participate in the educational program [9].

Participants in the substance abuse education course will demonstrate more positive attitudes toward alcoholism and participants in the substance abuse education course will demonstrate significant changes in their perception of personal competencies in working with the alcohol dependent person in a therapeutic capacity [2].

Thus, considering the high level of addiction statistics in Iran's society, and moreover, the education role in the drug abuse elimination, researcher is looking for a practical approach to represent, whether different methods of informing people influence their level of knowledge attitude and achievement. However, several studies have been conducted on the effectiveness of education in preventing addiction, but the novelty of this study is to compare the effectiveness of the preventive educational methods on the knowledge/attitude and performance/regarding to addiction. Methamphetamine and related stimulants are the second most frequently used illicit drugs worldwide. It is estimated that more than 35 million people around the world use this class of substance [11,12].

Materials and Methods

Materials

The present research method is profile-operational and kind of semi-experimental- interventional studies which took place in YAZD in 2017. The review technique was pre and post-test alongside the control group. For the purpose of educational courses, a group of 210 people had one teaching session every week (2 sessions overall).

Participants took pre and post-test before and after course. Furthermore three months after attendance education, they took posttest in order to evaluate the quantity of Three-month educational durability. Afterwards, participants were divided into the 3 categories, each one including 70 people. First group took instructions through short messages service (SMS), the second group by CD's and the third one through teaching booklets. The educational materials presented in the class were retaught separately for these three groups through text messages, CDs, or booklets. Finally, after 3 months of education through these three procedures, they took the final posttest. Therefore, with this study, we compared the educational effectiveness and sustainability of 4 educational methods: face-to-face training class, sending educational materials via SMS, Training through CDs and manuals.

Participants

Two hundred and ten employees of 6 assistance section of Yazd University of Medical Sciences employees were selected through multi stage clustering sampling. Criteria included: being between 18 and 64 years old, being staff of Yazd University of Medical Sciences, being participated in training classes, fill out the pre-test and post-test completely. Excluded Criteria included being less than 18 and more than 64 years old, not being staff of Yazd University of Medical Sciences, not being participated in training classes.

Measurements

In this study, the accumulate tool is the trial questionnaire (knowledge, performance and attitude) regarding Methamphetamine abuse which has 32 option (including: evaluation of knowledge scale, 15 questions, attitude scale, 10 questions and the quality of performance, 7 questions) which the stability of trial evaluated between 10 sample cases (amount of knowledge stability: 70% - attitude: 73%, and the performance: 67%)

Statistical analysis

The data were analyzed by SPSS-20, ANOVA, Covariance and other required trials.

Results

Overall, in this study 90 male (43%) and 120 female (57%) participated. In random division of groups, 40 females and 30 males took part in every divided subgroups. There wasn't a significant difference in gender between groups ($p > 0.05$). The level of education was bachelor degree. According to the table 1, the efficacy of attendance educational methods compared with other tutorial procedures of SMS, CDS and booklets on the level of knowledge, the participant's knowledge in none of educational steps (including attendance, durability and education with CDS, SMS and booklets) was significant nevertheless the table shows slight increase. The durability stage participant attitude was significant and to compare with the first attitude test, the durability after 3months increased(p -value:0.04) (Table 1). However, group's performance in durability stage(p -value:0.02) and after education through CDS, SMS and booklets(p -value:0.05), was expressive and considering table-1 durability after 3 months increased. Table 2 shows that none of the educational methods in the second stage of education (education with text messages, CDs and booklets) could have a significant impact on changing people's attitudes, awareness and performance.

Discussion

According to the research data, between 4 interventional stages of addiction obstacle and change of participant's knowledge attitude and performance towards Methamphetamine abuse, attendance education sessions of addiction prevention in the stage of 3 months durability, had significant consequences on improvement of their attitude and performance [8-10]. However there was no purpose roll impact after attendance education. These outcomes are not in the favor of other researcher's data [13]. In order to sustain, it could be explained that since they had just one educational session, it was not adequate to effect on their knowledge attitude and performance nonetheless, by knowledge of educational session between participants, more over it made them follow the subject to some extent and consequently regulated their performance in the durability. Bahreini and colleagues indicated in their research in 2014, to provide the primary avoidance from the ruinous danger of

Standard deviation			Average			Tutoring sessions
Performance	Attitude	Knowledge	Performance	Attitude	Knowledge	
2/14	5/00	4/67	18/68	23/35	34/42	Before attendance education
4/08	2/81	4/66	19/71	24/29	41/93	After attendance education
1/51	4/15	3/08	20/78	25/91	36/04	After 3 months persistence
1/88	3/33	3/97	19/72	22/73	35/58	Tutoring with SMS
1/17	3/67	2/91	21/90	23/41	36/60	Tutoring with CDS
3/13	3/56	4/86	20/02	23/75	34/51	Tutoring with booklets

Table 1: Average and different educational standard deviation in different occasions.

P-value	F	Mean square	df	Sum of squares		
86%	0/66	20/06	22	441/42	After attendance	knowledge
10%	1/44	11/71	25	292/79	Persistence after 3 months	
67%	0/84	13/69	25	342/39	After education though CDS/SMS booklets	
50%	0/96	14/59	20	291/88	After attendance	attitude
0/04	1/65	38/21	20	769/39	Persistence after 3 months	
0/20	1/26	6/85	20	137/12	After education though CDS/SMS booklets	
0/77	0/33	5/34	10	53/36	After attendance	Performance
0/02	5/49	14/34	10	143/44	Persistence after 3 months	
0/05	1/67	19/89	19	378/03	After education though CDS/SMS booklets	

Table 2: Attendance educational procedure approach to the tutoring methods using CDS/SMS booklets on the knowledge, attitude and performance.

addiction, it is up to the related planners and organizers to educate people with the prevention attendance sessions and teaching life skills through graphic images since their childhood until making the skills part of their inner side [5].

Furthermore the first priority must be using axis case educational (procedures which participant’s active role is more transparent). Given that participants being part of organizing such programs, it is beyond question that they feel of owner ship towards intervention targets and yet, the positive outcomes to develop.

Applying 3 intervention procedures including sending SMS, education through CDS and booklets, obviously, had no impact on changing participants’ knowledge and attitude regarding addiction and drugs. However, their performance was significant which regarding to table 1, using educational CDS had meaningful effect

on their performance. This finding is against Aghababae and Colleagues research [14] which they considered sending SMS and education with leaflet and catalogue on changing participant’s attitude was absolutely significant. The logical justification behind this difference is, the short messages service is only a textual message and not graphic or multimedia one, which there are capacity limits on sending topics and the recurrence exchange is not possible yet.

Due to educational CDS which were given to watch, there was not any feedback and there was possibility that just few numbers of participants watched CDS. Same theory goes for educational leaflets. Overall, the outcomes represent that participants have somewhat negative approach against drugs and addiction. Thus, such perspectives must be acknowledged through prevention schedules and this kind of attitude should be improved to the strong belief.

The result of research indicates that the sooner we tackle such educations since young age, the faster their approach will revise against addictive drugs.

Conclusion

Preventive methods have improved individual's performance and attitudes, however, teaching with CDS, SMS, and booklets have improved individual's performance, it has had no effects on the knowledge, attitude and performance, individually.

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Conflict of Interest

The authors have no conflict of interest.

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