Iran J Psychiatry Behav Sci. 2017 September; 11(3):e6676. doi: 10.5812/ijpbs.6676.

Published online 2017 July 30. **Brief Report**

Emotional Intelligence Training for Reducing Illicit Drug Use Potential among Iranian Nurses: A Pilot Study

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Received 2016 May 19; **Revised** 2016 December 13; **Accepted** 2017 May 15.

Abstract

Background: Some studies show that a low level of emotional intelligence (EI) is associated with self-destructive behaviors such as deviant behavior or smoking.
Objective: The current study aimed at determining the effects of EI on the illicit drug use potential among nurses.
Methods: The current quasi-experimental study was conducted in 2015 on 70 hospital nurses. Samples were randomly selected and divided into 2 groups (35 nurses in each group). Then, the experimental group subjects attended EI training sessions.
Results: Illicit drug use potential in the experimental group had significant negative changes in comparison with that of the control group ($P < 0.001$) after the completion of the training sessions.
Conclusions: Given the importance of EI to help nurses to avoid risky behaviors, holding training sessions on EI for nurses and nursing students appears necessary.

Keywords: Addiction, Emotional Intelligence, Health Promotion, Nurses, Training

1. Background

Nursing researches show that high emotional intelligence (EI) is positively associated with personal success, organizational citizenship, job satisfaction, and decreased job burnout (1). Some studies showed that low EI is associated with self-destructive behaviors such as deviant behavior or smoking (2). Drug use among health professionals is a problem that threatens professional standards and the delivery of quality services and, if not checked, can lead to grave consequences for health care consumers (3).

Several studies examined the relationship between EI and addiction (4, 5). But, so far, the relationship between EI and the illicit drug use potential among nurses is not studied using an interventional method.

2. Objectives

The current study aimed at determining the impact of EI training on the illicit drug use potential among nurses.

3. Materials and Methods

The current quasi-experimental study was conducted on the nurses of Mazandaran University of Medical Sciences, Iran, in 2015. After gaining approval for the current study from the ethics committee of Mazandaran University of Medical Sciences, a pilot study was carried out on 30 nurses with the same quality of the original study. Based on the results, 70 participants were selected as the study sample (with a confidence interval (CI) of 95% and test power of 80%). Subjects were randomly selected from Imam Khomeini (n = 23), Fatemeh Zahra (n = 17), and Bou-Ali hospitals (n = 30).

3.1. Procedures

The inclusion criteria were (i) an age range of 24 to 35 years, (ii) lack of acute and chronic physical and mental illnesses (determined by a psychologist), (iii) no drug use, and (iv) full consent. Exclusion criteria included all events preventing the continuation of the study (ie, physical and mental crisis). None of the samples left the study.

Participants were randomly divided into two 35-member groups (experimental and control). At first, 70 random numbers between 0 and 1 were made by computer (Excel software), and then, numbers were printed automatically. An envelope containing a number was given to each subject. Nurses with numbers < 0.5 were assigned into the experimental group and the ones with the numbers > 0.5 were assigned into the control group. Next, EI training was given to the experimental group by a psychologist using a standard EI checklist (6). The training period was 6 weeks, 2 sessions per week and each session minimum 60 minutes (6). Each of the dimensions in the checklist was taught in 2 training sessions by the psychologist. In the overall dimensions, subjects were followed up for 7 weeks.

3.2. Scale

Before and after the full course of training, illicit drug use potential was assessed in both the intervention and control groups, using the Iranian addiction potential scale (IAPS), developed by Zargar (2006), which considers the psychosocial conditions of Iranian society (7). The construct validity of this scale was 0.45 through linking it with 25 items of a symptom checklist 25 (SCL-25), which was significant at P = 0.001 (8). Based on the Cronbach's alpha, the validity of this scale was 0.90 in the present study.

3.3. Statistical Analysis

The data analysis was performed using SPSS 21.0 (IBM, Armonk, NY). The basic descriptive for the quantitative variables was expressed using mean (standard deviation), and n (%) for the qualitative variables. A Chi-square test was used to determine the relationship between the main and demographic variables. Also, the independent and paired t tests were used to compare the variance of scores in a group and across groups, before and after the intervention. Significance level was considered P < 0.05.

4. Results

Demographic profile of participants is presented in Table 1. By performing a Chi-square test (Table 1), no significant differences were observed in either group in gender, marital status, economic status, housing, education, and working shifts. The employment status in both experimental and control groups was contractual (45.7% and 37.1%, respectively), which indicated no significant difference across the groups (P = 0.483).

The average scores of nurses' illicit drug use potential are listed in Table 2 for each group. Also, before the training, the 2 groups were not significantly different (P = 0.340). According to Table 2, EI training in the intervention group had a significant adverse effect on the illicit drug use potential among nurses (P < 0.001).

Table 1. Demographic Characteristics of the Study Groups[a]

Variables	Experimental Group	Control Group	P Value
Sex			0.796
Male	10 (28.57)	13 (37.1)	
Female	25 (71.43)	22 (62.9)	
Age	29.54 ± 3.407	30.83 ± 3.785	0.471
Marital status			0.54
Single	08 (22.86)	05 (14.29)	
Married	27 (77.14)	30 (85.71)	
Level of education			0.493
B.Sc.	35 (100)	33 (94.28)	
MS.sc	0	02 (5.72)	
Economic status			0.271
Poor	11 (31.42)	14 (40)	
Average	21 (60)	15 (42.85)	
Higher than average	3 (8.58)	5 (14.29)	
Rich	0	1 (2.86)	
Residential status			0.54
Owner	30 (85.71)	27 (77.14)	
Tenant	05 (14.29)	08 (22.86)	
Work Shift			1
Fixed	04 (11.42)	04 (11.42)	
Rotating shift work	31 (88.58)	31 (88.58)	

[a]Values are expressed as No. (%) or mean ± SD.

The results of the paired t test for the scores of illicit drug use potential, before and after training in both groups, showed that EI had a significant positive effect on reducing the illicit drug use potential in the experimental group (P < 0.001; 95% CI: 4.358 - 6.099). F ± SD coefficient in both experimental and control groups were 3.346 ± 1.114 and 49.988 ± 6.228, respectively based on the paired t test.

5. Discussion

Results of the current study showed that EI training led to reduction of the illicit drug use potential (P < 0.001; 95%CI: 2.253 - 12.433). The study by Nadalinezhad et al. showed that EI training reduced the illicit drug use potential in the youth (5). Various studies on students (9), addicts

Table 2. Comparison of the Scores of Illicit Drug Use Potential in the Study Groups[a,b]

Variable	Control	Experimental	P^1 Value	95%CI
Pretest	41.71 (12.718)	40.60 (9.623)	0.340	-4.265, 6.493
Posttest	42.71 (12.472)	35.37 (8.496)	< 0.001[c]	2.253, 12.433
P^2 value	0.681	< 0.001[c]		

[a] P^1 and p^2 was assessed using the independent and paired t tests, respectively.
[b] Values are expressed as mean (SD).
[c] P < 0.001.

(10), and adults (11, 12) indicate an inverse relationship between EI and the illicit drug use potential. However, the results of the current study were not consistent with those of the study by Harakeh et al. (13). This difference could be due to the age and population difference between the studies. People with high EI have the ability to understand and analyze their own and others' emotional experiences, and this enables them to regulate their emotions and resist developing bad habits such as addiction (9). Moreover, Albein-Urios's study showed that the inability to properly control emotions is an important factor in the illicit drug use potential (14). A study by Stappenbeck and Fromme confirmed that training these skills led to the prevention of alcohol consumption and negative emotions (15). Moreover, there was a direct relationship between EI and the relapse rate of addiction (16). The present study also found that EI can be an important factor in explaining and predicting the illicit drug use potential among nurses, which was consistent with the results of Ghanbari et al. (9). The study by Coelho showed that the subjects with a higher EI exhibit less of a propensity to consume tobacco and alcohol (high-risk behaviors) (17). Additionally, the results of previous studies indicated a significant difference between the EI of addicts and non-addicts. In other words, addicts had a higher social intelligence. But, it was the first study that assessed this issue in the Iranian nurses.

5.1. Conclusions

Based on the results of the current study and other studies (reducer effects of EI on illicit drug use potential), it can be concluded that EI is a component that could be taught; it improves the quality of patient care and helps nurses to avoid risky behavior. Given the importance of EI, holding EI training sessions for nurses and nursing students seems necessary.

5.2. Limitations

The limitations of the current study included the nature of education and the probable relationship among the nurses. Also, the current study was a quasi-experimental survey. Hence, it is recommended to conduct randomized controlled trial studies with more details in different regions of Iran.

Acknowledgments

The authors would like to thank all the participants for their cooperation.

Footnotes

Authors' Contributios: Amir Hossein Goudarzian, Ravanbakhsh Esmaeili, Maryam Yousefi, and Abbas Balouchi conceived and designed the study and conducted the interventions. Reza Alizadeh-Navaei and Amir Hossein Goudarzian performed the data analysis and drafted the manuscript. Ravanbakhsh Esmaeili, Reza Alizadeh-Navaei, and Amir Hossein Goudarzian performed the statistical analysis and revised the manuscript. All authors read and approved the final manuscript

Declaration of Interest: Non-declared.

Funding/Support: This project supported by the research and technology deputy of Mazandaran University of Medical Sciences, Iran.

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