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The relationship between emotion dysregulation with psychoactive substance abuse in nurses working at hospitals of Kermanshah Iran 2016



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ABSTRACT

Introduction: Nurses are the largest group working in hospitals and play a key role in health care systems. They are also considered important members of health team. Therefore, they are very effective in society's and one's health. Objective: This article aimed to study the relationship of emotion dysregulation with psychoactive substance abuse among nurses.

Method: This is a descriptive, correlational study. The targeted population consisted of all nurses working in hospitals of Kermanshah, Iran in 2016. A sample of 350 was selected using multi-stage cluster sampling. However, the number reduced to 341. The data were

collected using three questionnaires: Gratz & Roemer (2004) Difficulties in Emotion Regulation Scale (DERS) and Bahremand et al. (2014) Psychoactive Substance Abuse Questionnaire. The data were analyzed in SPSS22 using Pearson correlation study and regression analysis.

Result: Research findings showed a significant relationship between the components of emotional dysregulation with tend to consume psychoactive drugs there, and the relationship level ($P < 0/001$) is significant.

Conclusion: So it can be concluded that components of emotion regulation predicted the psychoactive substance abuse.

Keywords: Emotion regulation, psychoactive substance, nurses

Cite This Article: Karami, J., Momeni, K.M., Hatamian, P. 2017. The relationship between emotion dysregulation with psychoactive substance abuse in nurses working at hospitals of Kermanshah Iran 2016. *Bali Medical Journal* 6(3): 502-506. DOI:10.15562/bmj.v6i3.640

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INTRODUCTION

Today, health systems are considered one of the most important components of sustainable development in human societies due to the direct relationship with the health of humans.¹ The realization of this important issue requires healthy, enthused and motivated therapists. Nurses are among these important therapists.² Since nurses are the largest group working in hospitals and play a key role in health care systems, they are considered important members of health team.³ Due to the nature of their professions, nurses are faced with pain, death, etc. Therefore, nursing is known as a stressful profession.⁴

Frequent working shifts at nights and extra shifts can endanger the psychological health of nurses, increasing the rate of stress (%) to risky behaviors.⁵ Psychoactive substance abuse is one of these behaviors, recently taken into account by psychologists and psychiatrists.⁶ Changing patterns of substance abuse from narcotics such as opium and its derivatives to psychoactive substances such as cocaine, ice, and alcohol has doubled the dilemma. Today, the production of traditional drug substance has decreased, while inexpensive industrial psychoactive substances are increasingly produced and sold in markets.⁷ Studies have shown that no single factor is a necessary and sufficient condition for drug abuse, but the psychoactive substance

abuse is the result of a combination of factors.⁸⁻¹⁰ Psychological variables are of great importance for drug abuse because psychologists believe that biological, social-cultural factors must be looked at from the perspective of the consumer.¹¹

Emotion regulation is of great importance for researchers.¹²⁻¹⁴ The results of some studies have shown that emotion regulation is associated with success or failure in different parts of lives.¹⁵ Evidence showed that cognitive regulation of emotion is one of the most important effective factors in psychological health.¹⁶⁻¹⁸ Emotion regulation is one's cognitive process while dealing with stressful events.¹⁹ Failure in emotion regulation is believed to be one of the main factors of drug abuse, associated with the disrupted cycle of dopamine in the limbic system.²⁰ Neural imaging studies have shown that parts addicts' brains function abnormally. This section plays a key role in cognitive regulation of emotion.²¹ Studies have indicated that poor emotion regulation plays a key role in drug abuse such as Methamphetamine, alcohol and committing violence.²²

Janfaza and Shirazi (2015) studied the predicting role of emotion regulation difficulty and self-control insusceptibility to addiction. They concluded that the difficulty of committing purposeful behavior, the difficulty of impulse control, lack of emotional

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awareness, and lack of emotional transparency had a positive relationship with addiction; however, self-control had a negative relationship with the susceptibility to addiction.²³ The studies by Mitchell and Johun (2013) showed that individuals who are involved with cigarette, ice, cannabis, cocaine, alcohol, etc. have difficulty in regulating their emotions.²⁴

Since preventive and invasive approaches have not been completed in previous decades and the role of psychological factors (emotion regulation), have remained ambiguous in forming an addiction to industrial psychotropic substances, this article aimed to study the relationship of emotion dysregulation with psychoactive substance abuse of nurses working in hospitals of Kermanshah, Iran.

MATERIAL AND METHOD

This is descriptive, correlation study. Despite casual studies investigating the cause-effect relationship of various phenomena, this article investigates the relationship between different variables. In correlational studies, the characteristics of a variable are employed to find out those of another. According to the Statistics Center of Medical University of Kermanshah, Iran, the statistical population consisted of 1,117 nurses.

A sample of 291 was first selected using multi-stage clustering sampling. The number of participants increased to 350 in order to enable the generalization. Since 9 nurses left the study, 341 questionnaires were analyzed. A list of Kermanshah hospitals was prepared. Then, 4 hospitals were randomly selected. Arrangements were made with the help of Directorate General for Training and Medical Science of Kermanshah University of Medical Sciences. The questionnaires were forwarded to the participants. If unwilling, they were asked not to participate in order to observe the ethics and follow the rights of subjects. The questionnaires were confidential and without names. The responses are not given to any organizations. The data were analyzed in SPSS22.

Research Tools

Difficulties In Emotion Regulation Scale (DERS)

DERS is used to assess the difficulty of emotion regulation developed by Gratz and Roemer in 2004.²⁵

The questionnaire consists of 36 items and 6 subscales: Non-acceptance of emotional responses, difficulty engaging in the goal-directed behavior, impulse control difficulties, Lack of emotional awareness, limited access to emotion regulation strategies,

and Lack of emotional clarity. The internal reliability was 0.93. The reliability of subscales was as follows: Non-acceptance of emotional responses (0.85), difficulty engaging in the goal-directed behavior (0.89), impulse control difficulties (0.86), lack of emotional awareness (0.80), limited access to emotion regulation strategies (0.88), and lack of emotional clarity (0.84).²⁵ Overall internal consistency was reported 0.86. Higher scores show lower emotion regulation.²⁶ The study by Karami et al. (2016) showed that the Cranach's Alpha was 0.87.¹⁷

Psychoactive Substance Abuse Questionnaire

The questionnaire was developed by Barethmand et al. (2014) to assess the psychoactive substance abuse. The questionnaire consists of 35 items. The subscales are cognition, emotion, and ready to Act, futurology, and governmental measures.²⁷ The items are scored on a 5-option Likert scale (Strongly Agree, Agree, No Idea, Disagree, and Strongly Disagree). Exploratory factor analysis was 0.76 by SPSS19. The overall reliability was 0.78 (Cronbach's Alpha).²⁷ In her M.A. thesis (The Relationship of Personality Characteristics and Problem-Solving Styles with Tendency to Drug Abuse), Aghae (2015) showed that the reliability of the questionnaire was 0.69 (Cronbach's Alpha).²⁸

RESULTS

341 nurses participated in the study. [Table 1](#) shows the descriptive variables, mean, and standard deviation.

Pearson correlation test was employed to study the relationship of emotion dysregulation with psychoactive substance abuse. [Table 2](#) shows the results.

The results of [Table 2](#) showed that the components of difficulties of emotion regulation had a relationship with the tendency to drug abuse. All relationships were significant at $P < 0.001$.

Concurrent regression analysis was employed to predict the subscale of psychoactive substance

Table 1 Mean and Standard Deviation of Variables

Variable	Min.	Max	Mean	Standard Deviation
Tendency to Psychoactive Substance Abuse	55	148	86.31	33.50
Emotion dysregulation	51	159	89.12	39.42

Table 2 Correlation Coefficient of Emotion Regulation Difficulties with Psychoactive Substance Abuse

Variable	Cognition		Emotion		Ready to Act		Futurology		Governmental Measures		Overall Score of Tendency	
	Correlation	Sig.	Correlation	Sig.	Correlation	Sig.	Correlation	Sig.	Correlation	Sig.	Correlation	Sig.
Overall Score of Emotion Regulation Difficulty	0.51	0.001	0.50	0.003	0.53	0.004	0.55	0.001	0.51	0.001	0.55	0.001
Non-acceptance of Emotional Responses	0.51	0.001	0.51	0.001	0.54	0.001	0.56	0.001	0.52	0.001	0.56	0.001
Difficulty of Purposeful Behavior	0.50	0.001	0.55	0.001	0.57	0.001	0.53	0.001	0.52	0.003	0.57	0.001
Difficulty in Impulse Control	0.52	0.001	0.50	0.001	0.53	0.003	0.56	0.001	0.51	0.001	0.56	0.001
Lack of Emotional Awareness	0.47	0.001	0.46	0.001	0.48	0.001	0.50	0.001	0.46	0.001	0.50	0.001
Limited Access	0.47	0.001	0.46	0.001	0.51	0.001	0.53	0.001	0.50	0.001	0.52	0.001
Lack of Emotional Clarity	0.44	0.001	0.41	0.001	0.41	0.001	0.48	0.001	0.40	0.001	0.45	0.001

Table 3 Regression Analysis for Predicting Psychoactive Substance Abuse based on Emotion Regulation Difficulty

Criterion Variable	Model Summary	Predicting Variable	B	β	Sig.
Tendency to Psychoactive Substance Abuse	R=0.68 R ² =0.45 F=24.96 P<0.001	Lack of Emotional Clarity	-0.81	-0.12	0.24
		Overall Score of Emotion Regulation Difficulty	0.15	0.18	0.17
		Non-acceptance of Emotional Responses	1.24	0.27	0.36
		Difficulty of Purposeful Behavior	0.60	0.10	0.31
		Difficulty in Impulse Control	1.04	0.20	0.001
		Lack of Emotional Awareness	-1.31	-0.26	0.09
		Limited Access to Emotional Awareness	0.12	0.03	0.001

Table 4 Standard Coefficients, Structural Coefficients, and other Canonical Correlation Analysis Indicators for Research Subscales

Variable	Coefficients		Joint Variance
	Standard Coefficient	Structural Coefficient	
Lack of Emotional Clarity	-0.30	0.63	Wilkes' Lambda=0.32 RS=0.68 F=7.62 P<0.001
Non-acceptance of Emotional Responses	0.47	0.81	
Difficulty of Purposeful Behavior	0.33	0.85	
Difficulty in Impulse Control	0.14	0.79	
Lack of Emotional Awareness	-0.31	0.72	
Limited Access to Emotional Awareness	-0.006	0.75	

abuse based on the difficulty of emotion regulation. Table 3 shows the results of regression analysis.

As shown in Table 3, the components of difficulty in emotion regulation can all predict 45% of subscales of a tendency to psychoactive substance abuse. Therefore, the model is significant ($P < 0.001$). The above table shows the regression model results.

A canonical correlation test was employed to investigate the relationship of difficulty emotion regulation with psychoactive substance abuse. Table 4 shows the results.

Canonical correlation analysis indicators in Table 4 showed that the predicting variable of difficulty of purposeful behavior is closely related to the first combined or canonical variable taken from the dependent variable of tendency to drug addiction. The Wilkes' lambda was 0.32, meaning that almost 68% of the dependent variable variance (psychoactive substance abuse) is predicted.

DISCUSSION

This article aimed to study the relationship of emotion regulation difficulties with a tendency to psychoactive substance abuse of nurses working in Kermanshah Hospitals. The results showed that overall and subscale scores of emotion regulation difficulties had a significant relationship with the tendency to the psychoactive substance abuse. This is consistent with certain studies before.^{14,22,23,24}

The study by Dragan (2015) on emotion regulation difficulties and alcohol drinking of young women concluded that emotional regulation difficulty had a direct relationship with drinking problem.²⁹ The study by Najafi, Mohammadi Far, and Abdullahi (2015) on the "Role of Emotional Performance and Tendency to Drug Abuse according to the Role of Emotion Regulation, Distress Tolerance and Sensation Seeking".

Concluded that the failure of each of the components of emotional performance and emotion regulation difficulties were linked with drug abuse.¹⁴

As the results show, emotional components had a significant relationship with the tendency or non-tendency to psychoactive substance abuse. Greater tendency to addiction causes one to have difficulty in emotion regulation. Note that low emotion regulation, caused by the inability to deal effectively with excitement, plays a key role in the onset of drug abuse.³⁰ The results showed that poor emotion regulation plays a key role in drug abuse such as Methamphetamine, alcohol and committing violence.³¹ Note that our findings are inconsistent with those of Quinn Patrick and Fromme (2010) who studied whether or not greater self-regulation helps adolescents reaching

the legal age to avoid heavy alcohol consumption and unprotected sexual relations. They performed a one-year longitudinal study.³² The result is, in fact, inconsistent with ours. Most studies on the relationship between cognitive factors and emotion problems focused on other narcotics rather than industrial psychoactive substances and participants other than nurses. However, our study investigated the relationship of variable emotion regulation difficulties with the tendency to psychoactive substance abuse of nurses.

Similar to other studies, there were some limitations. Although the participants were ensured in terms of confidentiality, some were felt not to provide honest responses. Since the study was conducted among the nurses working in Kermanshah Hospitals, the responses must be carefully generalized to other parts of Iran. The variables are recommended to be investigated among other health professionals and in other cities. A pilot study is also recommended. Health officials must pay attention that nurses, like other professions, are engaged with psychological worries related to their occupation, family, and children. If these worries are not taken into account, certain dangers such as tendency to psychoactive substance abuse are expected.

CONCLUSION

This study showed that overall and subscale scores of emotion regulation difficulties had a significant relationship with the tendency to the psychoactive substance abuse of nurses. It can be concluded that components of emotion regulation predicted the psychoactive substance abuse.

ACKNOWLEDGEMENT

This article was taken from the master thesis and was financially supported by Secretariat of the Headquarters for Combating Drugs of Kermanshah Province, Iran.

REFERENCES

1. Philip C, Carling MD. Optimizing Health Care Environmental Hygiene, *Journals Infectious Disease Clinics of North America*, Volume 30, Issue 3, 2016, Pages 639–660.
2. Shahnaz Dust, M.; Maghsoudi, Sh.; Tiri, R.; and Kazem Nejad Leyli, E. The Relationship between Burn Out and Occupational Support of Nurses, *Journal of Gilan University of Medical Science*, 2011, 26 (80), 49-59.
3. Min-Chi Chiu BS. Evaluating work ability and quality of life for clinical nurses in Taiwan; 2007, P. 318-26
4. Hasson D, Lindfors P, Gustavsson P. Trends in self-rated health among nurses: a 4-year longitudinal study on the transition from nursing education to working life. *J Prof Nurse*; 2010, 26(1), 42-66

5. Agha Jani, M.J.; Tiz Dast, T.; Ayas Ghorbani, M.; and Yajrou, M. The Relationship between Psychological Hardiness and Burn Out of Nurses, *Journal of Comprehensive Nursing and Midwifery*; 2013, 23 (70), 1-7
6. Azami, Y.; Sohrabi, F.; Yarjali, A. and Choupan, H. The Effectiveness of Emotion Regulation Training based on Gross Model in Reducing Impulsivity in Drug-dependent Individuals, 2014, 8(30), 128-141.
7. Setorg, S.; Kazemi, H.; and Raeesi, Z. The Effectiveness of Metacognitive Treatment in Craving Beliefs Associated with Psychoactive Substance Abusers, *Quarterly Journal of Addiction*, 2013, 7 (28), 148-162
8. Ghadimi, A.; Karami, J.; and Yazdanbakhsh, K. The Relationship between Early Maladaptive Schemas and Metacognitive Beliefs or Addiction Susceptibility, *Journal of Psychological Health*, 17 (2), 67-73.
9. Tonetti L, Adan A, Caci H, Depascalis V, Fabbri M, Natale V. Morningness-eveningness preference and sensation seeking. *European Psychiatry*; 2010, 25(2): 111-115.
10. Lindgren KP, Mullins PM, Neighbors C, Blayney JA. Curiosity killed the cocktail? Curiosity, sensation seeking, and alcohol-related problems in college women, *Addictive Behavior*, 2010, Pages 11-28
11. Ahmadi Tahour, S. and Najafi, M. Comparing Metacognitive Beliefs and Tolerance of Ambiguity of Addicts, Smokers and Normal Individuals, *Journal of Clinical Psychology*, 2011, 4 (12), 59-67
12. Sarah E, Gardner H, Lucy R, Betts S & et al. The role of emotion regulation for coping with school-based peer-victimization in late childhood, *Journals Personality and Individual Differences*; 2017, Volume 107, Pages 108-113.
13. Aldao A, Nolen-Hoeksema S, & Schweizer S. Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*; 2010, 30, 217-237
14. Najafi, M.; Mohammadi Far, M.A.; and Abdullahi, M. Role of Emotional Performance and Tendency to Drug Abuse: Role of Components of Emotion Regulation, Distress Tolerance and Sensation Seeking, *Quarterly Journal of Social Health and Justice*, 2015, 2 (5), 53-68.
15. Tamir M, Millgram Y. Motivated Emotion Regulation: Principles, Lessons, and Implications of a Motivational Analysis of Emotion Regulation, *Journals*, 2017
16. Thomson P, Jaque V. Self-regulation, emotion, and resilience, *Journals Creativity and the Performing Artist*; 2017, Pages 225-243
17. Karami, J.; Zakiee, A.; Hatamian, P.; and Bagheri, A., Comparing Emotion regulation Difficulties and Emotional Styles of Smokers and Non-smokers, *Journal of Urmia Medicine*, 2016, 27 (10), 848-855.
18. Esmael Nasab, M.; Andami Khoshsk, A.; Azarmi, H.; Samar Rokhi, A., The Predicting Role of Emotion Regulation Difficulty and Distress Tolerance of Addiction, *Quarterly Journal of Addiction Studies and Drug Abuse*, 2014, 8 (29), 49-63.
19. Samani, S.; Sohrabi, S.; and Sadat, S. The Role of Emotion Regulation in Relation to Emotional Problems of Parents, *Journal of Psychological Methods and Models*, 2011, 3 (1)
20. Wu L, & et al. Emotion regulation in heavy smokers: experiential, expressive and physiological consequences of cognitive reappraisal, *Front Psycho*; 2015, 6: 1555
21. Sutherland MT, McHugh MJ, Pariyadath V, Stein EA. Resting state functional connectivity in addiction: lessons learned and a road ahead. *Neuroimage*; 2012, 62: 2281-2295
22. Ghanadi Farnoud, M. and Alillou, M.M. Predicting Tendency to Cigarette, Alcohol, Narcotics, and Psychoactive Substance based on Emotion Regulation Difficulties and Child Abuse of Individuals diagnosed with Borderline Personality Traits, *Quarterly Journal of Addiction*, 2014, 8 (30), 98-112.
23. Janfaza, M. and Shirazi, M. Predicting Role of Emotion Regulation Difficulty and Self-Control or Addiction Susceptibility, *Quarterly Journal of Addiction*, 2015, 9 (33), 58-69
24. Mitchell L, John T. *Emotion dysregulation, ADHD and Smoking*, Duke University, Durham, NC; 2013, 09-00211
25. Grits KM, Roemer L. Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *J Psychopath Behav Assess*; 2004, 6: 41-54.
26. Shams, J.; Azizi, A.; and Mirzaee, A. The Relationship of Distress Tolerance and Emotion Regulation with Extent of Attachment of Smoker Studnets, *Journal of Hakim*, 13 (1), 11-18.
27. Bahremand M, Janajni P, Omrani A, Alikhani M. The Relationship of Family Functioning and Self-differentiation with Respect to Psychotropic Substances among Teenagers, *Adv. Environ. Biol*; 2014, 8(6), 1663-1668
28. Aghae, M. The Relationship of Personality Traits and Problem-Solving Strategies with Industrial Psychoactive Substance Abuse of Male Students, Master Thesis, Islamic Azad University, Kermanshah Branch, 2015.
29. Dragan M. Difficulties in emotion regulation and problem drinking in young women: The mediating effect of meta-cognitions about alcohol use, *Addictive Behaviors*; 2015, Volume 48, Pages 30-35.
30. Parker J.D, Taylor RN, Eastabrook J.M, Schell SL & Wood L.M. Problem gambling in adolescence: Relationships with internet misuse, gaming abuse and emotional intelligence. *Personality and individual differences*; 2008, 45, 174-180
31. Doran N, Mc Charque D, Cohen L. Impulsivity and the reinforcing value of cigarette smoking. *Addictive Behaviors*; 2007, 32, 90-98
32. Quinn Patrick D. Fromme K. Self-Regulation as a Protective Factor against Risky Drinking and Sexual Behavior, *Psychol Addict Behav*. September; 2010, 24(3): 376-385.



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