

Effectiveness of Mindfulness Training on Emotional Maturity and Occupational Stress of Nurses

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Received: 10 September 2017

Accepted: 28 February 2018

Published online: 1 March 2018

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Competing interests: The authors declare that no competing interests exist.

Citation: Jalili Nikoo S, Ghasemi Jobaneh R, Taghvaeinia A. Effectiveness of mindfulness training on emotional maturity and occupational stress of nurses. Report of Health Care. 2018; 4 (1): 20- 25.

Abstract

Introduction: Emotional maturity and occupational stress can play an important role in explaining the general health of nurses and their job performance. Mindfulness interventions have been increasingly used in different situations. The aim of present research was to investigate the effectiveness of mindfulness training on emotional maturity and occupational stress of nurses.

Methods: In this study, the research method was semi-experimental and the pretest- posttest design with control group was used. The statistical population in this study was nurses of Hajar hospital in Tehran in August 2017. 24 volunteer nurses were selected based on convenience sampling and were randomly assigned in to experiment and control groups (each group 14 individuals). The experimental group participated in 8 sessions of mindfulness training and the control group received no intervention. Occupational stress and emotional maturity questionnaires were used for data collection. The gathered data were analyzed by SPSS (version 18) using multivariate analysis of covariance ($p \leq 0.05$).

Results: The results showed that there are significant differences between post-test scores of the experimental and control group and mindfulness training could significantly improve emotional maturity ($p = 0.001$) and reduce occupational stress ($p = 0.001$).

Conclusion: Mindfulness is beneficial for improving emotional maturity and reducing occupational stress among nurses.

Keywords: Mindfulness Training, Emotional Maturity, Occupational Stress, Nurse

Introduction

Nursing profession plays an important role in providing health care. The general health of nurses and their professional performance is essential in patient care, but unsatisfactory working conditions can negatively influence the health and performance of nurses (1). One of the most unfavorable job conditions is occupational stress, which increases the risk of physical and psychological damage to employees (2, 3), and if it increases, it causes burnout in the staff and it increases the degree of conflict and dissatisfaction (4). On the other hand, having employees with the features and skills such as emotional maturity can play an important role in reducing the psychological

vulnerability and increasing job performance. Emotions have an important function in every human's life. Emotional maturity means how a person can respond to an occasion correctly, he or she controls his or her emotions and behaviors, and behaves in a manner that he or she encounters constructively with others (5). Research has shown that there is a positive relationship between emotional maturity with life satisfaction (6) and job satisfaction (7). Also, emotional maturity makes the person able to better tolerate unpleasant emotions and tensions (5). One of the approaches that can improve emotional maturity and reduce occupational stress is mindfulness training (8-10). Mindfulness based Stress reduction was

the first mental-based intervention developed by Jon Kabat-Zinn (11). Mindfulness means Intentionality, here and now, and non-judgmental attention in relation to experience (12). In the mindfulness training, using techniques such as body scan, individuals are taught to accept and be aware of their own experiences as they are. Research has shown that the training of mindfulness can have a positive effect on improving the emotion regulation and improving the quality of life (13) of individuals by the reduction of mental distress and the increase of well-being, happiness and hardiness (14, 15). Also, the background shows that mindfulness training in job positions is also beneficial and reduces stress and exhaustion (16-18). Several findings from around the world show that there is a high prevalence of occupational stress and psychological health problems among nurses (19-21). Considering that nurses' enjoyment of general health improves their individual and professional performance, it is necessary to implement interventions that enhance their ability. The purpose of this study was to investigate the effectiveness of mindfulness training on emotional maturity and occupational stress of nurses.

Methods

The method of this research is semi-experimental in which the pretest-posttest group design with control group is used. The statistical population in this study is Nurses of Hajar hospital in Tehran in August 2017. In this study, after the researchers' call for the presentation of a training course to reduce the psychological problems, 28 nurses volunteered and those with lower grades in the research questionnaires were selected. They were randomly assigned in experiment and control groups (each group 14 individuals). The criteria for inclusion into the study were being in the age range of 25-50, lack of psychological services outside the treatment sessions and at least one year of work experience. In this study, in order to apply an

independent variable, the experimental group participated in eight 120-minute sessions of group mindfulness training, while the control group did not receive any interventions. In this research, the purpose of the researchers was to use mindfulness training. To achieve this goal, an integrated protocol based on two mainstream mindsets was used, namely, mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT) (22). Before and after the implementation of the independent variable, pre-test and post-test were performed and the results of the experimental group and the control group were compared. It was explained to the participants that group meetings were organized to help them improve their health and also because of a research work, thus all participants fulfill the informed consent and entered the study with full satisfaction. Also, after the implementation of post-test in both groups, the training sessions were held for the control group in order to observe the ethics of the research. Emotional Maturity Scale was used to measure Emotional Maturity. This scale consists of 48 questions, which were made by Singh and Bhargava (1991). The aim of this scale is to examine different dimensions of emotional maturity including emotional instability, emotional regression, personality disintegration, social maladjustment and lack of independence. The response range is based on Likert from *very high* (5) to *never* (1). The higher score in this questionnaire indicates a lower level of emotional maturity. In a research, the reliability coefficient of this questionnaire was reported 0.75 using the Cronbach's alpha coefficient (23). The *Work-related Stress* Questionnaire is a tool designed by the UK Occupational Health and Safety Executive (HSE) to measure occupational stress indices and has 35 items with a 5-degree Likert scale (never 1, rarely 2, sometimes 3, often 4, and always 5). The questionnaire consists of seven components including demands, control, peer support, managerial support, relationships, role and change. In the

present study, the total score has been considered. Findings of a study show that this questionnaire has an acceptable reliability and validity (24). Collected data were analyzed using software version 18 and multivariate covariance analysis ($p \leq 0.05$).

Results

Twenty-eight nurses (24 women and 4 men) with mean age of 34.14 and standard deviation of 4.81 (year) participated in the study. Table 1 shows the descriptive information of the research variables. According to the results of Table 1, the decrease in post test scores of the experimental group is greater than that of the control group. It is worth noting that high scores in emotional maturity indicate low emotional maturity and are interpreted in reverse. According to the covariance test, the Levene's Test was used, which was not

significant based on the observed F in 0.05 level ($p \geq 0.05$); so the variances are equal. The results of covariance analysis are presented in Tables 2 and 3. Table 2 shows that the observed F is 15.32 and is significant at the level of 0.001, indicating a significant difference between the groups, and there is a significant difference between at least one of the variables in the two experimental and control groups. The results of the analysis of covariance (ANCOVA) are reported in the context of multivariate analysis of covariance (MANCOVA). The results of Table 3 show that the mindfulness training is effective on the improvement of emotional maturity ($F = 24.17$, $P = 0.001$) and Occupational reduction ($F = 19.29$, $P = 0.001$); the effect size indicates that mindfulness training was effective 0.50 and 0.44, respectively.

Table 1. Mean and standard deviation of pre-test and post-test scores of research variables

Variable	Experiment				Control			
	Pretest		post-test		pretest		post-test	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Emotional Maturity	121.79	12.21	91.57	17.72	117.14	11.44	113.86	10.49
Occupational Stress	94.29	17.50	77.64	13.83	97.79	12.01	98.14	10.74

Table 2. Multivariate covariance analysis results

Test	Value	F	Hypothesis df	Error df	Sig
Pillai's Trace	0.57	15.32	2	23	0.001
Wilks' Lambda	0.42	15.32	2	23	0.001
Hotelling's Trace	1.33	15.32	2	23	0.001
Roy's Largest Root	1.33	15.32	2	23	0.001

Table 3. Results of ANCOVA in the context of MANCOVA

Variable	Sum of Square	df	Mean of Square	F	Sig	Eta
Emotional Maturity	3935.57	1	3935.57	24.17	.001	.50
Occupational Stress	2444.41	1	2444.41	19.29	.001	.44

Discussion

The findings of this study showed that mindfulness training has been effective in improving the emotional maturity of nurses, which can be in line with the results of

research that concluded mindfulness interventions are effective in improving emotional related structures such as emotion regulation and emotion management (8-10). Furthermore, research has shown that

mindfulness training improves the emotional well-being of nurses, which is consistent with the current research (25, 26). It can be argued that the integration of the mindfulness trainings used in the present study included formal exercises in which the participant learns to behave with his thoughts, feelings and emotion in a different way, and adopt a different approach, so that he observes them purposefully at the moment (20). In fact, the purpose of the intervention is to increase the cognitive defusion, so that the person is less affected by unpleasant thoughts and emotions and he or she gets the ability to observe them, thereby the amount of tolerance and resilience increases (14, 15), which is associated with the emotional maturity. Emotional maturity is the ability of an individual to be aware of and control over emotions. In the same way, in mindfulness sessions, using various techniques such as sitting meditation and body scan, participants were taught how to be vigilant about their body sensations, and not to react against impermanence emotions. This exercise, along with other factors, resulted in the recovery of related structures, such as emotional maturity. Another characteristic of emotional maturity is that it allows a person to constructively respond to situations. In mindfulness training, when a person increases his/ her awareness, he or she gains more self-management and chooses better and gives better responses to different situations (13). In addition, the findings of this study showed that mindfulness training is effective on reducing nurses' Occupational stress, which is in line with the results of other researches (16-18). As mentioned, mindfulness training increases the level of person's observation and consciousness towards self, thoughts and emotions, and as the findings of the present study show the emotional maturity is positively improved.

Conclusion

In the present study, the participants, by learning the skills of mindfulness and

increasing emotional maturity, were able to gain more control over their emotions, less affected by harmful thoughts, gain more acceptance of their experiences, tolerate more daily tensions in work, act less reactional, and as a result, Occupational stress is reduced. This research has been carried out on nurses of the hospital and generalizing it to other employees of the organizations should be done carefully. It is suggested that by using mindfulness learning courses the emotional maturity of nurses would increase and their Occupational stress will reduce.

Ethical issues

Participation of nurses was voluntary and their informed consent was raised.

Authors' contributions

All authors equally contributed to the writing and revision of this manuscript.

Acknowledgements

Authors wish to appreciate all nurses who kindly participated in this research.

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