



Effectiveness of Mindfulness Training in Reducing of Aggression and Increasing Self-Esteem in Women with Breast Cancer

Ahmad Alipour¹, Valiollah Farzad², Sheida Sharifi Saki¹

¹Department of Psychology, Payame Noor University, Tehran, Iran

²Department of Counseling & educational Psychology, Karazmi University Tehran, Iran.

* Corresponding author's Email: alipor@pnu.ac.ir.

ABSTRACT: intelligence play an important role in variations related to mental health in women with breast cancer. The purpose of present study is considering the effectiveness of mindfulness trainings in reducing of aggression and increasing self-esteem in women with breast cancer. Statistic population of this study includes all Tehran women with breast cancer (visitors of Tajrish hospital) that, 30 of them were selected randomly and divided into two groups of test and control. Participants answer to aggression questionnaires of Bas and Perry and self-esteem questionnaire of Rosenberg before and after mindfulness training. Intergroup covariance analysis was used for analysis of findings. Results showed that cognitive training based on mindfulness is effect full on reducing aggression and increasing self-esteem meaningfully than control group on reducing aggression and increasing self-esteem in women with breast cancer. ($p < 0.01$). regarding cognitive nature of generated problems in effect of breast cancer for women, it is considered that aggression in the way of mindfulness is effective in recovery of problems resulted from hard-cure diseases like cancer.

Key words: Aggression, Self-Esteem, Mindfulness, Breast Cancer

ORIGINAL ARTICLE
Received 12 Apr. 2014
Accepted 30 May. 2014

INTRODUCTION

Cancer is a chronic disease that in spite of all developments in diagnosis and treatment, it is reminder of pain, restriction, deformation and death, and according the statistics of world health organization, cancer continually is introduced as a global disease. The most persons that suffer from cancer, experience a period of mental pressure. In some of these patients, this mental pressure is eliminated by itself and don't lead to long mental problems, and it can be considered as a natural consistent response, but some patients experience more severe mental problems that result in reduction of their life quality and daily performance. These mental problems that are severe clinically usually appear as a part of consistence disorder, basic depression disorder or an anxiety disorder.

In the other hand, treatment of cancer is associated with several mental pressures that some of them reduce the quality of life and lead to anxiety and depression. For instance, patients rank more severe the mental side effects like harshness, anxiety or wordiness than physical side effects like hair-missing and nausea, since some chemotropic patients leave their treatment for its mental problems. Crisis resulted from cancer lead to lack of balance and harmony of mind, body and spirit, but the most condition in this period for patient is the feeling of despair and frustration (Bijari et al., 2007).

Among all kinds of cancers, breast cancer is the most common and lethal and in emotional and mental point of view is the most effective cancer in women. From

Jun 1988 to December 2005, the rate of cancer in Iranian women was 22 in 100000 woman that involved the age group of 15-85 years old, and the most prevalence was in age group of 40-49. Breast cancer is uncontrolled growth of abnormal cells that in it cells grows without any control and divides more than natural amount and creates some masses known as tumors. These masses are often without pain and begin in upper and external part of breast firmly. Nature of breast cancer is something that fall in risk the female nature and personality of patients and face them some problems like anxiety, depression, despair, feeling of social loneness, afraid from husband's response, worriness about marriage, afraid from death and anxiety of sterilization and that all of these cases can lead to more aggression. Anger and aggression are of the most complex human emotions and is considered as a natural response to failure and abuse. Aggression can be considered as a defensive response that its purpose is solving obstacle and eliminating the threatening factor; and aggression is a behavior for damaging or eliminating something or someone. Aggression movements is done practically (damaging and eliminating to oneself and others) and sometimes verbally (Russell and Fehr, 1988).

Moreover, cancer threats the independence and ability of person for playing effective role in family and society, and leads the person to the feeling of lack of competence and self-confidence. Therefore, reducing of self-esteem amount in patients with cancer is a predictable

and important thing that can lead to expression of responses like depression, anxiety, fear, anger, problem in communicating, and lack of person's interest to participate in self-caring programs. One of things that should be considered in self-esteem is the relevance of gender with self-confidence. According scientific literatures, the rate of self-esteem in men and women of each society is different according to cultural variables and roles that society considers for them. So, the order of disease effect and its side-effects is different in amount of self-esteem in men and women, since women, most for changes of mental image from their body and men for change in ability, performance and role playing suffer from changing self-esteem amount. Self-esteem have a close relationship with mental image of person from itself and consistence method. Meaning that, positive image from self-body causes creating the feeling of worthiness in person and contrary, mental image that is changed in anyway causes some changes in amount of worthiness feeling. Disease, treatments or side-effects regarding them, leads to changing mental image and self-esteem and this thing is more obvious in chronic diseases for their long and predictable nature For this purpose, Fennell (2004) suggested in his experiment that, with cognitive therapy based on mental-awareness, the depression of patients have been recovered and addition to depression recovery, this training leads to increasing their self-esteem. Mental consequences and treatment of cancer has been the subject of most research activities. Since, aggression is the negative mode of mind with cognitive and unadaptive behaviors deficits and digression, and in the other hand self-esteem have cognitive and emotional parts, one of the solving methods of behavioral disorders like aggression and increasing self-esteem is enjoyment from mindfulness treatment training.

Mindfulness is of treatments that can have positive effect on psychological variations of women with breast cancer including negative mode of mind, emotion and behavior. Mindfulness is a treatment technique that is combination of making calmness and a restrict cognitive factor.

Mindfulness, in its simplest definition according to Kabat-zin and Hun is awareness from something that happen in time. Mindfulness is not a new technique, but basic use of it in treatment of psychological and physical disease almost is a new phenomenon. Mindfulness is a holistic interference that doesn't distinguish any differentiation between body and mind. This model work with whole of existence and personality of person at a same time and considers the person as an integrated whole. One of the treatment approaches that uses mindfulness is cognitive treatment based on mindfulness (MBCT).

In this theory, relationship between cognitive processes and anxiety is complex and multidimensional.

Tizdel refers to two kinds of beliefs; exciting beliefs (hot recognition) and mental beliefs (cold recognition). Emphasizing on exciting beliefs is of characteristics of Tizdel's cognitive therapy (Ghasem Zadeh, 2000). In this approach, participants are trained that when negative thoughts and emotional appears in them, before response to them, let them to remain in their mind in the form of their original. Moreover, this approach provide some patterns for training decentralization skills and uses the techniques for processing information that sustains mind-creative cycles (Segal et al., 1997).

Mindfulness associated with breathing and using body members, awareness from body, breathing, sound and thoughts without any judgment about them, leads to changing special emotional meaning and person understands that thoughts are simple rather than being radiation of fact and these anxiety and negative thoughts are not necessarily correct. The method of mindfulness causes that person be conscious about automatic and normal behaviors and achieves increasing awareness and consciousness in his /her routing activities, this awareness about thoughts and feelings leads to changing relationship of person with those emotions and thoughts (Kabat Zin, 1990), in fact, mindfulness instead of changing contents of thoughts, changes the relationship of person with his/her thoughts.

Also, results showed that, mindfulness trainings related to control group, have been effective in increasing self-esteem and decreasing the aggression of women with breast cancer after test and following. Since, mindfulness training have been based on decreasing aggression and increasing positive excitements and reducing negative excitements, it can be said that this results is in consistent with previous results (Evans et al., 2008) showing that mindfulness training is effective in recovering of mental well-being, reducing aggression and anxiety and increasing life quality.

Moreover, cognitive therapy based on mindfulness uses some techniques (like body checking, sited practice of breathing and ...) that help to promoting relaxation response recover the skills of attention and concentration setting (Diebold, 2003), in fact mindfulness provide some techniques for coping with aggression (Berslin, 2002).

Also, findings of Brown and Ryan (2003) showed that mindfulness is predictor of self-regulated behavior. in explanation of this finding, we can say that since increasing attention to thoughts, excitements and practical interests is of positive aspect of mindfulness (Ogden, 2006) and training of mindfulness increases the emotion without judgment and help to better seeing and acceptance of excitements and physical phenomenon (Brawn, 2003), so it can be said that excitements play important role in life and excitement setting as a treatment method in modifying excitements is related to self-esteem and positive social interactions, causes confronting with stress

situations and lead to increasing activity in response to social situations.

A few studies have investigated the mindfulness trainings directly on the recovery of self-esteem, including Golden and Grous that investigated the effectiveness of mindfulness trainings in emotional setting of persons with disorder of anxiety, and concluded that cognitive therapy based on mindfulness leads to recovery of anxiety signs and increasing self-esteem.

Since the effect of mindfulness training on concepts like anxiety and depression have been indicted and these concepts is related to self-esteem, so it is considered that mindfulness also is effective on increasing self-esteem.

Also, this finding is a emphasize on findings of Fahimeh Yousefiyan and Asghari pour showing that mindfulness training is effective in recovery of self-esteem on female students.

So, training of mindfulness not also causes that women with breast cancer be aware from negative aspects of mind associated with deficits and cognitive disorders and negative emotions and creating like his aggression and this play an important role in recovery and modification of their emotional and modes , but also caused increasing their self-esteem via regulation of excitements.

According this, the purpose of this study is the investigation of mindfulness training effect on patient with breast cancer, till reduces their aggression and increase their self-esteem.

MATERIAL AND METHODS

The method of this study in information gathering is experimental. Statistic population of this study included all Tehranian women with breast cancer (referrals to Erfan hospital). For sampling among cancer patients population (referral at Mehr 2014 to Azar 2024), those who achieve higher score in Bass & Perry aggression test were indicated and among them, 30 persons were selected randomly. Participants announced their satisfaction about participating in this study, and randomly assigned to two groups of control and test.

Test group were 18- 63 years old and control group were between 23-to 53 years old.

Rosenberg's self-esteem scale: This scale has 10 articles that is expressed with zero and one, and sentences like "it is true about me, and it is not true about me. Higher score in this scale means higher self-esteem. Other researcher considered the consistency coefficient of this scale in a group of students in California University (741) that was equal to 88%. Also, in Iran the consistency coefficient of this scale (Mohammadi, 1999) was obtained with 77% retesting. Inter consistency coefficient of this scale in this study was 87%.

Aggression scale: aggression scale was conducted using Bass & Perry scale that measures body, verbal, harshness and hostility aggression behavior. This scale

have 29 sentences that are scored from 1 to 5, from " it is like me completely, to it not like me at all. Maximum and minimum score in this scale is equal to 29 and 145. since the components of aggression are additive, the components of this questionnaire are summed together and is obtained a general score. Bass and Perry (1993) reported the credit of this score with method of internal consistency method between 80% to 82%. Also in Iran internal consistency of questionnaire (Mohammadi, 1999) have been reported equal to 91%. In this study, also the scale's internal consistency calculated according Kronbakh Alfa that was equal to 88%.

Conducting method: participants (30 persons) were divided to two test and control group. Each of participants was assigned to each group randomly. Treatment group included 8 sessions of 90 minutes. During first session of treatment, first the logic of treatment (relationship of creating with thoughts) was presented and then general purpose of treatment based on mindfulness was trained; each session was allocated to one of mindfulness techniques associated with treatment logic and its treatment mechanism, this techniques were conducted with group members practically. During first session after welcoming, supplying the questionnaire of aggression and self-esteem was conducted among group members. Then, structure and purposes of women with breast cancer, principle rules of group, the concept of mindfulness and automatic conducting were explained. After initial conclusions, consciousness eating, revising and discussion about it was practiced, next the practice of body checking and focusing on short breathing was done. Finally, home works and essays were presented. In second session first practicing of body checking , homework revising , ask and answer to questions and problems of group member , caring sited of confronting with problems , recording of pleasant happens was done and like last session , essays and homework were presented.

Third session like last session, listening practicing, sited caring and its review, recording of pleasant events and presenting essays and homework's revising was done. In fourth session, addition to revising homework, listening drills, sited caring, breathing space and walking caring and its review was done, excitement of anger, its difference with, fear and self-esteem, stay in the present, in women with breast cancer were studied. In addition to the Fifth Session Weekly homework, sitting meditation, breathing space was done in Roman poetry "inn " was read and discuss a problem-oriented coping strategies and emotion and tell a storm was on the tree analogy , permit and certificate of adoption took place. In the sixth session, the practice of sitting meditation, breathing and meditation space with mountains illustration was done, the relationship between mood and thought and practice alternative ways of continuing to reflect changes made to the dungeons to see dealt with practice meditation, and the

rock reached. Accepting the unchangeable aspects of breast cancer. making it the eighth session of meditation sitting practice and breathing space in addition to reviewing homework, review of programs and practice meditation stone retainer plan to talk about what you have learned in this period for coping with mood and emotional state of the next session ended. During the group sessions of mindfulness -based cognitive therapy for more effective coordination and integration of mind and body, mindfulness techniques, yoga instructional videos were available to members of the group.

RESULTS

To remove the effect of pre-test and multivariate, analysis of covariance was used. Descriptive indicators,

average and standard deviation of two test and control group have been reported in table 1 in the form of pre-test and posttest in self-esteem and aggression. Assumptions of multiple covariance was reviewed and approved. Wilks Lambda multivariate test results with the 65.21F2, 25 = and a value of 0.36 showed no significant differences between control and experimental groups (0.01P <) there. Followed by univariate ANOVA test results showed that in the experimental and control groups on the variables of self-esteem (8.59 F1, 26 =, 1.1MSe = 0.01p <) and Aggression (3.19 F1, 26 = 8.38MSe = 0.01p <) there are significant differences. According to the reported averages, the experimental group had a less mean average in aggression variable and high average in self-esteem variable.

Table 1. Descriptive indicator of self-esteem and aggression

Time of Measuring	Statistic	Control	test
Pre-test Self-esteem	Average	15.47	15.53
	Standard deviation	1.36	1.6
Post-test Self-esteem	Average	19	16
	Standard deviation	0.92	1.1
pre-test Aggression	Average	85	85.9
	Standard deviation	23.24	21.5
Post-test Aggression	Average	67.8	80.8
	Standard deviation	20.85	18.9

DISCUSSION

The purpose of this study was, the effectiveness of mindfulness training on anger reduction and increased self-esteem in women with breast cancer. The results showed that mindfulness training reduces aggression, and increased self-esteem.

The results of this study can be consistent with the results of studies (Evans et al., 2008) showed that mindfulness meditation training improves psychological well-being, reduce stress and enhance the quality of life is effective. Golden and Grous in a study , investigated the effect of mindfulness training in setting of individuals with anxiety disorder and concluded that cognitive therapy based on mindfulness leads to recovery of conflict signs , anxiety and increasing self-esteem . Such training in communication skills, Cognitive Mindfulness and coping skills, health education, stress management and emotional support causes to increase self-esteem, mental, emotional and mental stability, improve quality of life and improvements in mood disorders and coping mechanisms for anger and reduce anxiety, depression and psychological distress, as well as reduced sensitivity in patients with aggression and anger.

Berkowitz (1989) in pattern cognitive theory - the modern concept of association states that failure is only one of several factors that can cause negative emotions and thus be aggressive. Except frustration, annoying factors and other negative situations that can cause negative emotions and negative emotions that humans no

longer leads to aggression. Self –failure of Negative situations, includes situations in which the person has been treated unfairly or that person in that situation is degraded, or otherwise hurt by others.

Negative situations and excitements caused the expression of aggression that aggression tools may also leads to family, interpersonal, occupation conflict, negative measurement of other about person, negative self-concept and low self-esteem and self- confident. Self-esteem - feeling of being valuable - believed to be comprised of three components, affective and behavioral tendencies. This sense of a collection of thoughts, feelings, emotions and experiences throughout our life arises. Thus, self-esteem have cognitive and emotional components. Berkowitz believes that negative affect due to unfavorable conditions in terms of memory encoding from cognitive interviews with some negative thoughts, emotions and behaviors are reflected litigant. Although these networks are weak at the beginning but the more cognitively oriented associations are activated are stronger (Fakhari Race, 2000). When Tdayha were strong enough, the activation of each of the other networks will follow. Memories, thoughts and feelings of anger, hostility and aggression anger or actions related to reflection (like a fist squeezing hands and teeth) to the triggers. One of the implications of this theory is that even when it does not create a negative environment, thinking Aggression can also enable aggressive.

One of the most successful therapeutic approaches in reducing anger and aggression is mindfulness-based cognitive approach. In this approach, the purpose is prevention from consolidation of negative thoughts, comprehension consciousness helping breathing and using body members, awareness from events, awareness from body of breathing, sound and thoughts and acceptance of thoughts without judgment about them leads to changing special emotional meanings and person understand that thoughts rather than being radiation from facts, are simple thoughts and thoughts like I am a broken or "I won't be successful are not correct necessarily. This method causes that person understand automatically activities and achieves its habitual behaviors and a growing awareness in their daily activities. In addition, the techniques of mindfulness-based cognitive therapy uses some techniques (e.g., physical verification, sitting meditation, breathing exercises, etc.) that can help to promote relaxation response (Shapiro, 1998) set the focus to improve skills give (Diebold, 2003) actually mind awareness, provides techniques for dealing with anger. Confidence and ability to better cope with pain were observed in them.

Pooler and Johnson found that comfortable increases the accessible possibility to positive information in memory, therefore accessibility to options against too risky thoughts can be easily achieved (Ghasem Zadeh, 2000). Therefore, since high prevalence of psychological side-effects in patients with breast cancer, this disease generally because of common image based on being dangerous is associated with fear of its social consequences like deformation or behavioral disorders including sexuality inefficiency or anger and aggression and high reduction of self-esteem among them, regarding to cognitive nature of created problems because of breast cancer for women, reduction of aggression with method of cognition based on mindfulness is able to be helpful in recovering the problems resulted from hard treatment disease like breast cancer.

REFERENCES

Berslin, F.C. (2002). An information-processing analysis of mindfulness: Implications for relapse prevention in treatment of substance abuse, *Clin Psychol Sci Prac*, 9: 275-299.

Bijar, E., Qnbryhashm Abadi, B., Aghamohammadian Shrbaf, C. & Homae, N. (2007). The efficacy of group-based treatment Amyddrmany on the increased life expectancy of women with breast cancer. *Studies of Education and Psychology*, Ferdowsi University, 10: 184-171.

Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being, *J Person Soc Psychol*, 84: 822-848.

Diebold, J. (2003). *Mindfulness in the machine: A mindfulness-based cognitive therapy for the reduction of driving anger*, [Dissertation], New York: Hofstra University.

Evans, S., Ferrando, S., Findler, M., Stowell, C., Smart, C. & Haglin, D. (2008) Mindfulness-based cognitive therapy for generalized anxiety disorder. *J Anxiety Disord*, 22(4): 716-21.

Fakhari Race, S.A., Chaste, N. & Khodapanahi, M. (2000). Comparison aggressive types of attachment styles. *Journal of Psychology and Educational Sciences*. 40(4): 72-59.

Fennell, J.V. (2004). Depression, Low self-esteem and mindfulness. *Behavior Research and Therapy*, 42, 1053-1067.

Franz, S.A.L. (2002). *Social Psychology*, translated by M. Firoozbakht and M. confectionery, Tehran: Institute of expressive culture.

Ghasem Zadeh, H. (2000). "Cognition and Emotion (clinical and social aspects)", Tehran: Culture; 1378.

Kabat-Zinn, J. (1990). *Full catastrophe living using the wisdom of your body and mind to face stress, pain, and illness*, New NY: Bantam Doubleday Dell Publishing Group, Inc.

Mohammadi, N. (1999). A preliminary study of validity and reliability Rosenberg Self-Esteem Scale. *Journal of Iranian Psychologists First Year*, 4:313-312.

Ogden, P. (2006). *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*: W.W. Norton.

Pour Chmr Mountain, G. (2011). Effectiveness of mindfulness training on enhancing mindfulness and increasing assertiveness in students with test anxiety. *Course 3/100-82 Number*, 1:82-100.

Russell, J.A. & Fehr, B. (1988). Reply to Ekman and O'Sullivan. *Journal of Experimental Psychology: General*, 117(1), 89-90.

Segal, G et al. (1997). "Mindfulness-based cognitive therapy, a new approach to preventing relapse of depression", Mohammad Khani Parvaneh, optative Far Shima, global radiation, Azra, translator. Tehran: Fradyd

Shapiro, S.L., Schwartz, G.E., Bonner. (1998). Effects of mindfulness-based stress reduction in medical and premedical students, *J Behav Med*, 21: 581-599.

Sicily, b. (1383). *Blood diseases and cancer*, the venerable translator. Tehran: Generation Next, third edition. *Therapy*, 42:1053-1067.