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The Impact of Stress Management Skills Training Using a Cognitive-Behavioral Method on Death Anxiety and Resilience of Elderly Women Undergoing Surgery in Kerman

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ABSTRACT

The paper examines the impact of stress management skills training on death anxiety and resilience of elderly women undergoing surgery in Kerman, using a cognitive-behavioral method. The statistical population of the quasi-experimental study includes elderly women undergoing surgery in Kerman. 30 elderly women selected through random sampling participated in the research. The sample was then divided into two groups randomly (15 people in the experimental group and 15 people in the control group). The experimental group received stress management training in 10 sessions, while the control group did not receive such training.
As for research instrument, death anxiety and resilience questionnaires were employed. Data was subsequently analyzed through covariance analysis. Results showed that death anxiety scores in the experimental group were significantly lower than the control group after intervention [<0.05]. Likewise, resilience scores of the experimental group were significantly higher than the control group [<0.05] and stress management program reduced death anxiety, while improving resilience. Therefore, it can be claimed that planning for stress management training of elderly women undergoing surgery is significant.

Keywords: *stress management, death anxiety, resilience, elderly women undergoing surgery*

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INTRODUCTION

The Sanitation in the elderly tends to differ from that of young and middle-aged people. Approximately 75% of deaths after surgery occur to people over 65 years old. It must be noted that above this age, mortality rate increases vertically. Prevalence of surgery among the elderly calls for greater focus on the dangers of operations, along with preparatory measures for patients (Asghari , 2001)).
Elderly people are more prone to multiple chronic diseases compared to young people. 80% of elderly people in America suffer from one or multiple chronic conditions and thus 40% of this population are incapable of doing at least one of their daily activities. 33% of total number of visits to hospitals, 50% of hospital beds and 44% of the total days of hospitalizations are related to the elderly. All surgical operations cause psychological as well as physiological stress among the elderly and this stress can easily disturb their physiological balance (Majidi, 2001).
Surgeries, confronting death and anxiety stemming from it are regarded as the significant constituents affecting the mental health of the elderly (Bahrami et al., 2013). Death anxiety is defined as the constant, abnormal and morbid fear of death or dying. According to the definition of National Health Service of the United Kingdom, "Death anxiety is the morbid, abnormal, or persistent fear of one's own death or losing contact with the world, or events after death" (Venes et al., 2013). This type of stress covers motivational, cognitive and emotional constituents and changes under the influence of stages of development, as well as social and cultural problems of one's life (Valikhani et al, 2014). According to Devin's, death anxiety comprises fear of personal death, concerns about sufferings of death, mental closeness to death and fears related to it and disturbing thoughts about death. He highlights the fact that the two concepts of anxiety and death anxiety are different (Valikhani et al., 2014). The level of death anxiety in individuals varies based on their individual differences, as well as many other social factors. Research findings show that individual, social, cultural and religious differences affect death anxiety. These differences can in turn impact individual's quality of life. One of these factors is age. A study by Gosar et al. showed that there is a linear relationship between death anxiety and age (Gesser, et al., 1987).
Yet another influential factor in death anxiety is gender. Findings of a number of studies indicate that elderly women experience death anxiety more than elderly men (Buzzanga et al., 1989 and Pierce et al., 2007). Anxiety and fear of death is commonplace in all cultures, and various groups and religions

deal with it in different ways (Bahrami et al., 2013). One study for instance shows that death anxiety among black people is higher than white people (Myers, 1980).

Another survey indicates that the level of death anxiety in developing countries is higher than other countries (Sheykhi et al., 2013). Nevertheless, with regard to the issue of multiple surgeries among the elderly, they require high levels of adaptability and the concept of resilience gains significant (Cicchetti et al., 1993). Simply put, resilience is one's successful adaptation to the environment, despite threats and unfavorable conditions surrounding him (Masten et al,. 2004). Resilience is one's ability to create bio-physiological as well as mental balance in precarious conditions (Connor et al., 2003). It is also defined as a type of self-restoration which entails positive emotional, affective and cognitive implications (Luthar , 2005).

Research findings show that specific groups and people possess higher levels of resilience and thus display positive adjustment in dealing with unfavorable and undesirable conditions (Glantz, 1999). Resilience is considered as a significant factor in dealing with stress and some individuals or groups experience higher anxiety compared to others (Causar et al., 2002).

Research findings show that stress management skills training increases resilience among women (Piri et al., 2015 and Dehgan et al., 2015). Furthermore, a study conducted by Timerman (1998), showed that stress management training program can reduce the effects of mental pressure, stress and daily problems (Timmerman et al., 1998).

Stress management using cognitive-behavioral treatment includes constituents such as increasing awareness about stress, relaxation training, identification of dysfunctional thoughts, cognitive reconstruction, problem solving training, and self-expression and anger management skills training (Linden, 1999).

Studies conducted in this area show that behavioral or muscle relaxation training reduces stress (Halamandaris, 1999). Likewise, training coping strategies, controlling as well as dealing with stress significantly reduces participants' scores in depression, stress and general diseases, along with social function disorders (Shirbin et al., 2008).

Research on the effect of stress management on mental health revealed that stress management training promotes mental health while reducing physical symptoms, stress, social function deficiency and depression (Rezaie, et al., 2009 and Rezaie et al., 2009 and Rajabnezhad et al., 2012 and, Nosratabadi et al., 2015 and Lak et al., 2012 and Jesus, 2001 and Forman, 1982).

This paper aims at determining the impact of stress management skills training on death anxiety and resilience of elderly women undergoing surgery in Sirjan using a cognitive-behavioral method. Therefore, the question raised is whether stress management skills training is effective in death anxiety and resilience of elderly women undergoing surgery, and whether it helps them in managing their lives and creating a new phase in their coping ability.

Research Methodology

The statistical population of this quasi-experimental study comprises all patients with obsessive-compulsive disorder who have visited the psychology centers of Sirjan. In terms of sampling, participants were selected through convenience sampling and as for inclusion criteria, diagnosis of obsessive-compulsive disorder based on structured clinical interview for emotional disorders, Maudsley obsessive-compulsive questionnaire and confirmation of diagnosis based on psychiatrist and psychologist's opinion, as well as being over eighteen years old were taken into account.

15 participants were selected and put into three groups of fifteen using random sampling. The first group received meta-cognitive treatment, while the second group received ERP (Exposure and Response Prevention) treatment. The third group which constituted the control group received an irrelevant treatment.

Based on the studies conducted by Ghorbani, Watson and Shah Mohammadi, Death Anxiety Questionnaire by Ghorbani has high validity (Ghorbani et al., 2008). To evaluate death anxiety, death anxiety scale was employed which includes 15 items and evaluates the participant's attitude towards death. Participants answered each of the items as yes or no, yes indicating anxiety in the individual.

Scores of the scale vary from zero to fifteen, and higher scores indicate higher levels of stress towards death. Validity and reliability tests of death anxiety scale support the acceptable validity of the scale. In the original context, test-retest reliability coefficient of death anxiety scale is of 8 % concurrent validity, and its correlation with the anxiety scale and depression scale is reported to be 27% and 40% respectively (Raiabi et al., 2001).

Researchers have examined the validity and reliability of this questionnaire in Iran and reported split-half reliability coefficient of 6% and internal consistency coefficient of 73% (Raiabi et al., 2001). To measure the reliability of death anxiety scale, death apprehension scale and anxiety scale were used. Results showed 0.04 correlation coefficient of death anxiety scale with the apprehension scale and 34% correlation coefficient with the scale of anxiety (Raiabi et al., 2001).

Caner and Davidson's resilience questionnaire (2003) is a 25-item questionnaire which measures resilience construct on Likert scale of 0 to 4, minimum score being zero and maximum one hundred. Results of the preliminary study on the psychometric properties of this scale confirms its validity and reliability (Conner et al., 2003. The internal consistency, test-retest reliability and convergent and divergent validity of the scale was reported as adequate. Although the exploratory factor analysis has confirmed the inclusion of five factors for resilience scale (i.e. merit/ personal strength, confidence in personal instincts/ tolerance of negative emotions, positive acceptance/ safe relationships, inhibition, spirituality), since the reliability and validity of the questionnaires are not definitely confirmed, total score of resilience for research purposes is regarded as valid (Conner et al., 2003. The validity and reliability of the Persian version of resilience scale was measured and confirmed in preliminary studies of normal and diseased samples (Besharat , 2007).

Research Procedure

Having recorded the basic information of the 30 elderly patient women over 60 years' old who were undergoing surgery, participants were selected based on their willingness to take part in stress management training program using cognitive-behavioral technique through random sampling, and death anxiety and resilience questionnaire were used as pre-test.

Next the experimental group received 10 sessions of training and at the end of the sessions post-test was executed for both the experimental and control group. The following is a summary of the content of stress management training sessions.

Table 1: Content of Stress Management Training Sessions Using Cognitive-Behavioral Technique

Session one	Stressful factors and response to stress, progressive muscle relaxation for 16 muscular groups
Session two	Stress and awareness/progressive muscle relaxation for 8 muscular groups
Session three	Relationship between thoughts and emotions/ breathing, imagery, progressive muscle relaxation for 4 muscular groups
Session four	Negative thinking and cognitive distortions, breathing, imagery, progressive muscle relaxation
Session five	Replacement of logical thoughts/ Autogenes training for weight and heat
Session six	Efficient Coping, Autogenes training for heartbeat, breathing, stomach and forehead
Session seven	Implementation of effective coping responses/ Autogenic training along with imagery and induction
Session eight	Anger management/ Mantra meditation
Session nine	Self-expression training/ breath counting meditation
Session ten	Social support/ personal stress management program

Research Findings

Descriptive findings of the study including statistical indexes such as mean and standard deviation are presented in table 2 for all the variables studied in the research. To investigate the impact of stress management training program using cognitive-behavioral technique, covariance analysis was used and results are shown in table 4.

Table 2: Mean and Standard Deviation of Death Anxiety and Resilience Total Scores in Elderly Women Undergoing Surgery in Kerman Experimental and Control Group, Pretest-Posttest

Group	Variable	Pre-test		Post-test	
		Mean	Standard deviation	Mean	Standard deviation
Experimental	Death anxiety	24/90	2/78	18/86	2/37
	Resilience	26/11	3/54	29/20	3/75
Control	Death anxiety	25/21	3/49	24/99	3/73
	Resilience	22/66	2/94	22/13	2/33

According to the results shown in table 2, mean and standard deviation in the post test of the experimental group are significantly different from the control group. To support this finding, ANOVA analysis is applied.

Table 3: ANOVA Results in MANCOVA Text on Scores of Post-tests in the Experimental and Control group

Variables	Square sum	Degree of freedom	Square mean	F	Test power
Death anxiety	257/81	1	257/81	**16/43	25%
Resilience	199/20	1	199/20	*10/77	32%

**P<0/01 *P<0/05

Data presented in table 3 indicates the significant difference in the post-test scores of death anxiety and resilience between the two groups, holding the effect of pre-text constant.

The findings suggest that there is a significant difference between the experimental group who received stress management training using cognitive-behavioral technique and the control group who did not receive such training in terms of

death anxiety reduction and improvement of resilience. In fact, training was effective for the experimental group.

Discussion and conclusion

The paper aimed at determining the impact of stress management skills training on death anxiety and resilience of elderly women under surgery in Kerman using a cognitive-behavioral method. The results obtained indicate that there is a significant difference between experimental and control group in terms of death anxiety reduction and improvement of resilience.

The data obtained is in line with studies indicating positive effect of stress management training using cognitive-behavioral technique on death anxiety reduction and improvement of resilience (23, 24, 25, 26, 27, 28, 29).

Summing up the results, it can be concluded that stress management skills training using cognitive-behavioral technique reduces death anxiety among elderly women undergoing surgery and increases their resilience. This results from learning how to deal with inevitable problems and challenges of life and functionally cope better with stress and unpleasant life events.

Group training is significant for patients to express and share personal experiences and can create an atmosphere for the improvement of healthy features and better management of death anxiety, despite the denial and projections caused by the patient's condition and the surgery. The interaction and questions and answers by patients are related to some important information about them and assists them in expressing their emotions, while learning how to cope with undesirable feelings.

Ultimately group training reduces death anxiety and through the improvement of resilience, patients can resist their disease-related problems more effectively (18). Based on the findings of this research, it is suggested that cognitive-behavioral stress management therapy is applied as a complementary therapy and medical treatment towards the amelioration of psychiatric disorders among the elderly undergoing surgery.

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