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THE EFFECT OF MUSIC THERAPY ON QUALITY OF LIFE AND HOPE IN ELDERLY LIVING IN NURSING HOMES

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ABSTRACT

The aim of present study was to investigate the effect of music therapy on quality life and hope among the elderly. This is a quasi-experimental with control group design and pre-test and post-test. 40 elder (20 male and 20 female) among residents of elderly care centers of Kermanshah city was selected and divided to control and experimental groups. The experimental group was exposed to 20 sessions of music therapy while the control group not received any intervention. The data were collected by quality of life questionnaire (SF-36) and Snyder adult hope scale (AHS). All data were analyzed using statistical software SPSS ver 21 and analyzed with multivariate analysis of covariance (MANKOVA). Our study showed that music therapy has positive effects on quality of life and elderly hope, but based on Iranian culture, this is recognized that home environment is better than nursing home. However, music therapy has positive effect on elderly hope and quality of life.

Keywords: *Music Therapy, Quality of Life, Hope, Elderly*

INTRODUCTION

Today, older than 60 years of the world's population is almost equal to less than 5 year's old population. And it is predicted that by 2050, the elderly population will be more times than population of children less than 5 years old (Osouli, 2008). According to the Statistical Centre of Iran in 2007, about 6.5% of the Iranian population has been reported as elderly (Salarvand and Abedi, 2008). Also statistics show that behavioural problems in older age are one of important issues. The prevalence of depression has been reported in elderly hospital about 79% (El Kady and Ibrahim, 2013) and in the elderly living in private homes approximately 50% (Thakur *et al.*, 2013). The prevalence of depressive symptoms among elderly of urban families has been reported 86% (Nejati, 2007). And problems related to quality of life is emphasizes on importance of the quality of life in elderly population. Quality of life is an indicator key and because that encompasses many aspects of mental, physical and individual performance, pay attention to it is very important (Quehenberger *et al.*, 2014).

According to Weaver (King *et al.*, 2006) quality of life is to understand each person's health status and satisfaction of this condition. A new issue that be introduced about quality of life is the hope in life (Szramka-Pawlak *et al.*, 2013). According to Snyder (Snyder, 2000) hope is a positive motivational state that is based on finding sense and the interaction of the individual with the environment (Snyder, 2006). Hope is essentially a subjective, based on mutual sense of purpose and a plan to achieve the goal. Since the life expectancy is associated with attitudes and structures of life. So anyone who hopes to how to make a living and quality of life, it is critical to improve the quality of their lives (Snyder, 2006). It is reported that the hope is directly related to the quality of life (Hawro *et al.*, 2013). And related to reduce mental health problems and increasing mental health of quality of life (Dembo and Clemens, 2013, Rajandram *et al.*, 2011). Given the importance of quality of life and life expectancy in the elderly, various psychological approaches is formed which is used to improving the mental health of older people.

Most convenient and cost-effective methods are best intervention. And music therapy to enhance the quality of life and life expectancy can be seen as an advantage. And music therapy to enhance the quality of life and life expectancy can be seen as an advantage. As the study showed that music therapy has a positive effect on quality of life in elderly Hong Kong (Lee *et al.*, 2010). Music therapy is effectiveness on quality of life, public health and mental health of elderly women living in institutions (Jeon *et al.*,

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2009). Music therapy causes a feeling of better health, fewer feelings of loneliness and visits to the doctor and the significant improvement in geriatric depression (Burak, 2007). Polt *et al.*, (2014) showed that music has significant effect on differently in psychological, physical, spiritual, and social quality of life. And the pain was reduced noncable in participants.

Although various reports suggest the usefulness of music therapy, but little research has been done on the effects of music therapy on life expectancy. On the other hand, the research needs of the elderly in the sample are lower investigated. Increasing elderly population and the importance of mental health care they need effective interventions. Therefore, the aim of present study was to investigate to determine the effect of music therapy on quality life, life expectancy and loneliness in elderly.

MATERIALS AND METHODS

This study is a quasi-experimental and pre-test post-test design with control group. A total of 20 men and 20 women among the elderly (aged care centres) Kermanshah randomly selected according to age, gender and economic status and randomly assigned to experimental and control groups.

Inclusion and Exclusion Criteria

Inclusion: Not having severe physical and mental illness, concomitant use of psychiatric drugs, 60 to 75 years of age, no death a close relative in the last two months.

Exclusion: Lack of desire to continue studying and incomplete responses to the questionnaire.

Instruments

Quality of Life Survey (SF-36): The SF-36 is a standardized questionnaire derived from a larger set of questions used in the US Medical Outcomes Study in the mid-1980s (Ware and Sherbourne, 1992). The SF-36 has become one of the most widely used of the health-related quality of life measures. These are generic, multi-dimensional measures of self-reported health status. The SF-36 questionnaire consists of 36 questions (items) measuring physical and mental health status in relation to eight health concepts:

- Physical functioning
- Role limitations due to physical health
- Bodily pain
- General health perceptions
- Vitality (energy/fatigue)
- Social functioning
- Role limitations due to emotional health
- General mental health (psychological distress/wellbeing)

Responses to each of the SF-36 items are scored and summed according to a standardized scoring protocol (Ware *et al.*, 1993), and expressed as a score on a 0–100 scale for each of the eight health concepts. Higher scores represent better self-perceived health. The validity of the questionnaire has been reported equal to 0.95, 0.88 and 0.93 by Goldberg (1988), Chung *et al.*, (1994) (using Cronbach's alpha), and Chan (1985), respectively (Taghavi, 2001).

Hope Scale Questionnaire: A 12-item measure of a respondent's level of hope. In particular the scale is divided into two subscales that comprise Snyder's cognitive model of hope: (1) Agency (i.e., goal-directed energy) and (2) Pathways (i.e., planning to accomplish goals). Of the 12 items, 4 make up the agency subscale and 4 make up the Pathways subscale. The remaining 4 items are fillers. Each item is answered using a 4-point Likert-type scale ranging from Definitely False to Definitely True. Internal consistency was determined using Cronbach's α for Hope Scale questionnaire. The internal consistency of the questionnaire applied in the study was high (Cronbach $\alpha=0.80$).

Intervention Plan

At the first, popular singer of elderly population selected with an early survey. Then, music tracks of selected singers that has positive emotional and sense for elderly recognized and selected. For this, we use the music and psychology professor's views for better selection. Music therapy was done in 20 sessions and each session was 40 minutes that presented in 4 weeks and 5 sessions in a week. Pre-test was done before the sessions and post-test was a week after the last session.

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The result distributions are presented and basic descriptive parameters (arithmetic mean ± standard deviation) were calculated. The differences between the groups were tested by MANCOVA. The level of statistical significance was set at $P < 0.05$ by SPSS software, version 21.

RESULTS AND DISCUSSION

Mean age of experimental group was 68.75 years and in control group was 67.90.

For data analysis, we used normality of the variables, homogeneity of variance-covariance matrices, correlation between variables and homogeneity of variance tests. After certify this tests, we used MANCOVA test for data analysis.

Results showed that dependent variables (quality of life and hope) at pre and post-test in experimental and control groups is significant at 95% confidence level, and a period of music therapy can predict the 79% of change in quality of life and hope participants (Table 1).

Table 1: Multivariate analysis of quality of life and hope at pre and post-test

Test	Value	Df1	Df2	F	Sig	η^2
Wilks' lambda	0.20	3	33	43.54	0.001	0.79

Result showed significant different between experimental and control group for physical health, mental health and hope of participants at 95% confident level (Table 2). Physical health, mental health and hope showed 66, 39 and 46% increase in participants.

Table 2: Analysis of quality of life and hope at pre and post-test

	Variable	SS	df	MS	F	Sig	Eta
Pre-test	Physical health	908.03	1	908.03	56.59	0.001	0.61
	Mental health	62.78	1	62.78	7.04	0.01	0.16
	Hope	347.28	1	347.28	95.09	0.001	0.73
Group	Physical health	1118.69	1	1118.69	69.72	0.001	0.66
	Mental health	206.02	1	206.02	23.10	0.001	0.39
	Hope	112.10	1	112.10	30.69	0.001	0.46
Error	Physical health	561.53	35	16.04			
	Mental health	312.06	35	8.91			
	Hope	127.81	35	3.65			
Total	Physical health	92669.38	40				
	Mental health	89237	40				
	Hope	16521	40				

Due to the elderly Residency in nursing homes possible with different physical and mental problems involved and affected their quality of life (El Kady and Ibrahim, 2013, Thakur *et al.*, 2013). Quality of life has many dimensions that physical function, physical problems, emotional, mental health, social functioning, body pain and general health are included. So that the dimensions of quality of life divided in both the physical and mental subscales. Increased sense of physical and mental health led to decrees mood disorders and physician referral of elderly (Burak, 2007) and helps the elderly in lower levels of depression (Sheibani and Pakdaman, 2010) and malaise (Zare *et al.*, 2009).

According to the American Music Therapy Association (2010), music therapy is defined as “... the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program.” The therapeutic use of music is one such intervention and has gained increasing popularity since the early 1990’s (Bruer *et al.*, 2007). Research has shown that the right hemisphere is generally the area of the brain that responds to music, and that this area is among the most frequently preserved parts of the brain in people with dementia (Sifton, 2000). Therefore, music can be an important medium for

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bringing pleasure through familiar music, bringing comfort and peace to promote sleep, as well as distraction during times of agitation. These are important aspects in enhancing quality of life. Logsdon *et al.*, (2007) found that programs that increase pleasant events, improve mood, and decrease negative behaviours such as agitation are use interventions in helping to improve quality of life. Music therapy plays a very important role in the care and treatment programs provided for the elderly. Music has always been a part of life and is an important source of pleasure, enrichment, inspiration and motivation for many people.

The elderly can benefit from music therapy regardless of musical skill or background. Music therapy addresses their physical, psychological, emotional, cognitive, spiritual and social needs. Music is chosen or improvised to reflect different people's ethnic, social and religious backgrounds or preferences. There are several reasons for introducing music therapy to aged persons, not the least being the reinforcement that they are still valued members of the wider community. Other reasons are to enhance their quality of life, to provide stimulation and motivation, to provide a social atmosphere for them to interact, to provide the opportunity for self-expression and to just "have fun". Our study showed that music therapy has positive effects on quality of life and elderly hope, but based on Iranian culture, this is recognized that home environment is better than nursing home. However, music therapy has positive effect on elderly hope and quality of life.

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