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**THE EFFECTIVENESS OF META –COGNITIVE THERAPY ON LIFE  
EXPECTANCY IN AUTOIMMUNE PATIENTS IN RAZI PSYCHIATRIC CENTER  
OF TEHRAN**

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**ABSTRACT**

The purpose of this study was to evaluate the efficacy of Meta-cognitive therapy in elevating life expectancy in patients with autoimmune disease in Razi Psychiatric Center of Tehran. The study population included all women with autoimmune disease in Razi Psychiatric Center of Tehran, Since this study is quasi-experimental with pretest-posttest control group and random assignment ,in this study, the sample size for the study of meta-cognitive therapy in women with autoimmune disease, was considered 30. Data used to measure the variables under study were, Schneider Life expectancy questionnaire (1991),and Meta-cognitive therapy (uncontrollability beliefs, level of activity, the avoidance coping, mindfulness task faulted, rumination, Notice) During 8 sessions and surveys were conducted on a sample group. To analyze the data, descriptive statistics (frequency, percentage, mean, standard deviation, variance, diagrams, etc.) And inferential statistics to test the hypothesis test (analysis of covariance) was SPSS software environment. The results showed that training meta-cognitive methods has been effective to increase the life expectancy in autoimmune patients in Razi Psychiatric Center of Tehran.

**Key words: autoimmune patients, life expectancy, Meta-cognitive**

**INTRODUCTION**

All people in their personal and social life are faced with numerous problems In fact, life is nothing but a continuous process of

dealing with problems and tries to resolve them, therefore problems are inevitable part of our lives and people require a learning

process to deal with them beneficially instead of acting passively. If life's important issues remain unresolved, stress, fear and concern will be resulted which ultimately lead to physical and somatic problems. Autoimmune disease occurs when the immune system mistakenly start attacking body. Among more well-known autoimmune diseases lupus, rheumatoid arthritis and multiple sclerosis (MS) are more common disorders. Most of these diseases are chronic, but depending on the condition they can be controlled. Autoimmune diseases affect women more in comparison with men and are more prevalent in some families, and they have inherited fields [4].

Many chronic diseases, including autoimmune disease are associated with the high risk of depression and hopelessness. The process of auto immune disease causes depression in three different ways. If autoimmune disease attacks some areas of the brain which are involved in emotional expression and control different types of behavioural changes can be followed. In addition, depression may be due to autoimmune disease or the changes in endocrine glands. The third factor which increases the risk of depression in patients with autoimmune disease is the side effects of some drugs. It is obvious that in the case of depression ,losing hope and diminishing

the life expectancy are most inevitable consequences experienced (Bijari & co-workers [3]).. Meta cognitive therapy (MCT) is one of the recent advances in understanding the causes of mental health problems and their treatments. This approach is based on the theory of elementary functions of the executive order [1], most patients report feelings of no control over their thoughts and behaviours. Another important feature of psychological disorders is that patients' thought patterns and attention focus on themselves and threatening issues. Autoimmune disease affects women more than men and are more common in some families (so has inherited fields). [7], Therefore, according to the importance of the mentioned subject in this research the effectiveness of meta cognitive therapy in elevating life expectancy in autoimmune patients in Razi Psychiatric Center of Tehran was the researcher's concern.

## **MATERIALS AND METHODS**

The study population included all women with autoimmune disease in Razi Psychiatric Center of Tehran, since this study is quasi-experimental with pretest-posttest control group and random assignment, in this study, the sample size for the study of meta-cognitive therapy in women with autoimmune disease, was considered 30. Data used to measure the

variables under study, Schneider Life expectancy questionnaire (1991), and Meta-cognitive therapy (uncontrollability beliefs, level of activity, the avoidance coping, mindfulness task faulted, rumination, Notice) During the 8 sessions and surveys were conducted on a sample. To analyze the data, descriptive statistics (frequency, percentage, mean, standard deviation, variance, diagrams, etc.) were implemented and inferential statistics to test the hypothesis test (analysis of covariance) was SPSS software environment.

## RESULTS

General hypothesis

Meta-Cognitive therapy affects in elevating the life expectancy in autoimmune patients.

As it can be seen in the table 2 findings from the multivariate analysis of variance

showed that the value of F at  $P < 0/001$  is statistically significant. therefore it can be concluded that there is a meaningful difference between meta-cognitive therapy and life expectancy in autoimmune patients. To understand this difference, the more of univariate analysis of covariance (Ancova) was used.

### Partial hypothesis

Hypothesis 2: Meta-Cognitive therapy affects on life expectancy in autoimmune patients. According to the table 3, the average life expectancy in the experimental group is more than the control group. To determine whether this difference is significant to the results obtained, Table 4 based on variance analysis results indicates that:

Table 1: Compares the two groups in the pre-test and post-test

Statistical Indicators	Groups	Count	Average	Standard deviation
Life expectancy	control	15	1/93	/349
	Test	15	2/54	/276
Meta-Cognitive therapy	control	15	3/24	/395
	Test	15	3/09	/311

Table 2: Analysis of variance to assess the effects of meta-cognitive therapy on life expectancy in autoimmune patients

Test name	Amount	DF Hypothesis	DF Mistake	F amount	Significance level
Pilaye test	989/	2	25	11/33	0/000
Wilks Lambda test	011/	2	25	11/33	0/000
Helting test	85/32	2	25	11/33	0/000
Largest root test	85/32	2	25	11/33	0/000

Table 3: Mean and standard deviation of hope in the two groups

groups	count	average	Standard deviation
control	15	21/50	2/27
test	15	22/20	1/93

Table 4: Effect of treatment meta-analysis of variance on life expectancy in autoimmune patients

The source	Sum of squares	DF	Mean square	F level	Significance level	Eta Square
Intergroup	80/9	1	80/9	50/2	0/001	0/27
Pretest	43/06	1	43/06	27/1	0/001	0/0
Error	27/4	26	1/6	-	-	-

Since the design of the study is pretest and posttest with control group, in order to control the effect of pretest factor the analysis of covariance was performed. As seen in the table the result of univariate analysis indicates the F value for difference between the groups ( control and experimental) in significance level  $P \geq 0 / 00$  is meaningful , staying that there is a significance difference between the scores of life expectancy with the control group ,consequently the rejection of null hypothesis (Hypothesis III) is confirmed; with justification of meta cognitive therapy on increasing the life expectancy in autoimmune patients, which has been tested in 'size effect' table. The other considerable factor is the Eta squared which reflects the percentage of the variance in life expectancy that has arisen in the implementation of the experimental procedure. Eta squared values is equal to 27/0 and if we turn it into percentage equals 27% ; this means that the 27% of variations of life expectancy scores are stemmed by the implementation of meta cognitive therapy methods, in other word meta cognitive group therapy causes 27% inflation in life expectancy scores in autoimmune patients.

## DISCUSSION

Analysis the main hypothesis of this study it can be concluded that there is a

significant difference among perceived stress, tolerance and life expectancy in autoimmune patients. the results of the research which has conducted by Khezri Moghadam and colleagues are compatible with the result of the present research relating the effectiveness of meta cognitive therapy on perceived stress ,tolerance and life expectancy.

Analyzing the specific hypothesis concluded the followings:

- 1) There is a significant difference between the effectiveness of meta cognitive therapy on perceived stress in autoimmune patients.
  - 2) There is a significant difference between the effectiveness of meta cognitive therapy on tolerance in autoimmune patients.
  - 3) There is a significant difference between the effectiveness of metacognitive therapy on life expectancy in autoimmune patients.
- The results of this research in compatible with the research by Najafi (2014) and research by Bahadory, Hashemi [2], the relationship of hope and resiliency is well consistent with psychological.

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