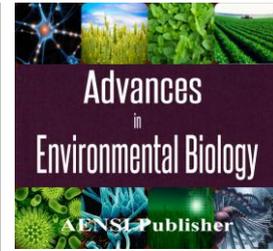




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### Effectiveness of Occupational Therapy on Quality of Life Among Chronic Schizophrenia Patients

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#### ABSTRACT

The aim of this study was determine the effect of occupational therapy (OT) on quality of life chronic Schizophrenia patients in care center of chronic patients. Subject were 64 chronic schizophrenia patient. They were selected in the form of accessible non-probable random and They were investigated through Schizophrenia quality of life scale (SQLS). data was analyzed by (Independent T and ANCOVA analysis). Results showed that OT had a significant effect on scores of SQLS in OT group and there is a difference between mean of SQLS both sexes. It is necessary that other therapies be used to promote quality of life.

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### INTRODUCTION

Schizophrenia is one of the most complex and weakening mental disorders [12]. This disorder is severe and long and it is clarified by various kinds of weakening signs [17]. Life-long Schizophrenia outbreak has almost been reported one per cent in the United States [24]. In Iran, the amount of outbreak is % 0.5 till 2006 [18]. Illness process is like what long periods of life time of % 95 of patients is spent with symptoms of this sickness [24]. At least half of the patients develop severe weakness despite of medicinal therapy, that is why paying attention to their quality of life is highly important [23,15,3]. Study in terms of effectiveness of Schizophrenia on life quality and vice versa has revealed that quality of life the patients reduces in different steps both mentally and visually. Existence of these problems in their lives has declined their daily activities, social relationship, and financial affairs [3,32,21]. According to observations, %30 of Schizophrenia patients have not responded to medicinal therapy and they are drug resistant [5]. Moreover, nowadays, it is believed that only reliance on medicinal therapy in order to reach effective therapy is almost impossible [6]. Therefore, it is here that enabling work of social-mental therapies becomes distinct. One of the commonest ones is OT. OT is a social-mental intervention in which its aim is to enable the individual to do daily activities [31]. One of the basic rules of OT believed on application of objective activity therapy. Objective activity enables individuals to reach the most pleasant level of independence despite of limitations for sickness and sickness severity [7]. Different researches have conducted in terms of effectiveness of OT on quality of life which has reached various results [10,19,25].

This research was conducted according to different results from conducted researches, to reduce side effects of medicinal therapies, and since few researches have been done in this regard in our country. The aim of this study is to investigate the effect of OT on quality of life chronic schizophrenia patients.

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**Method:**

This research is a clinical trial study. The population under study is chronic schizophrenia patients in Zahedan, Iran which were placed in two groups of intervention (32 people) and control (32 people) by non-probable random method.

Collection-data tool was schizophrenia quality of life scale (SQLS). SQLS have got 30 questions assessing quality of life schizophrenia patients in three areas of social mental (15 questions), energy and motivation (7 questions), and symptoms and side effects (8 questions). The choices of questions include never scored(0), rarely scored(1), sometimes scored(2), often scored(3), and always scored(4). Therefore, the higher scores individuals obtain, the lower quality of life they have (worse) and vice versa, lower scores show higher (better) quality of life. Researches have shown that this questionnaire has high fluency and sustainability to investigate quality of life schizophrenia patients. SQLS has been softened with cultural composition of our country and content-validity method was used to check its validity (based on survey from ten authorities) and second test was used to check its scientific trust. Its sustainability was trusted at  $r=.98$ [11].

Sixty four patients were investigated by SQLS (The questionnaire was completed by examiner). The entering criteria to the study was physical weakening disability and age between 30-60 years old. Sixty four patients were randomly selected and they were divided in to two groups of intervention and control. OT was done 6 hours weekly for the period of 6 months. OT included painting, calligraphy, gardening, pottery making, and team sports for men as well as embroidery, mirror embroidery, knitting, painting, and doll making for women. Two groups were reassessed after doing the project with SQLS. Obtained information was analyzed through descriptive and concluding statistics (Independent T-test and ANCOVA).

**Results:**

ANCOVA test was used to provide effective OT on quality of life in intervention group. Furthermore, independent T test has been used to determine the mean difference of quality of life scores in two groups, men and women. Meaningful level of  $P<0.05$  was used in this research.

Leven test has been used in table 1 to Equality Error variance in quality of life variable.

As it can be seen from the table1, there is not a significant difference in variances of scores, in significant level of  $P<0.05$ , in posttest of intervention and control groups and thus the assumption of variance integrity has been met.

ANCOVA was conducted on scores of post test scores controlling post-test research (life quality) in order to investigate the trial intervention effectiveness. Table 2 shows the results of ANCOVA on post-test scores controlling pre-test.

Results in table 2 indicate that the results of ANCOVA significant is in quality of life variable ( $P<0.05$  and  $F=312.259$ ). Therefore, the research assumption stating that occupational therapy is effective on quality of life of schizophrenia patients is confirmed. In addition, effect-size coefficient shows that %83 difference of two groups in the stage of posttest in terms of quality of life variable is related to trial intervention and statistical power is one.

Independent T analysis was used to compare mean of scores of quality of life among men and women. Table 3 shows the results of independent T analysis on Mean of scores among men and women.

As it has shown in table 3, score mean of quality of life among women is less and better, and according to these results, the research hypothesis on existing a difference between score mean among men and women is confirmed.

**Discussion:**

Investigation of research hypotheses reveals that OT has had a significant effect on score mean of quality of life in intervention and control group. As the results of ANCOVA points out that OT has increased the amount of quality of life in intervention group in stage of posttest.

Bayer *et al.* [4], in a research titled "effects of ergo therapy professional long-term measures in integration of schizophrenia patients" showed that ergo therapy OT cannot effect on social-element unity of schizophrenia patients in long run [4]. Liberman *et al.* [16], in a research entitled "training comparison of skills with mental social OT for drug-resistant schizophrenia patients" revealed that training of skills has been effective [16]. Elkud *et al.* [9], in a research entitled "the relationship between occupational and health factors among individuals with continuous sickness living in the societies" indicated that, in spite of expectation, OT has not had any effect on life quality of schizophrenia patients [9]. The reason for these different obtained results can be rooted in cultural differences, way of implementation, difference in sample volume, demographic features, difference in implementing OT, and implementation location.

In this regard, Foruzandeh *et al.* [11], reached similar results with results of this study in a research [11]. Other researches also showed that OT had a positive effect of quality of life schizophrenia patients [1,30,13,29]. Scientific evidence reveals that there is deep relationship between human identity and what an individual does and individual's engagement in an activity and emp significant loyment helps positive thinking. An individual

forms his social character by trying hard in within his job and he knows his profession as a tool for making his living [28,8]. OT intervention in an intervention aiming to place the patient in social environment without drug dependence. Clinical work using daily activity helps the patient's condition and communicative triangle (activity, patient, therapist) creates a situation and expands and environment in which patients experience learning and possibility of using his energy so sick environment can be inverted in to creative one [5].

The next hypothesis of the research telling that there is a difference between score mean of quality of life men and women was confirmed and it showed that women have better quality of life. Eklund *et al.* [9], in a research entitled "the relationship between job-satisfaction factors and relevant variables to health" showed that there is no difference between men and women in terms of job satisfaction or daily-activity satisfaction [9]. Xiang *et al.* [33], in a research entitled "sex difference between clinical and social demographic features and quality of life of schizophrenia patients of China" showed that there is no difference in quality of life both sexes [33]. Zouari *et al.* [34], in a research entitled "quality of life among schizophrenia patients" also showed that there is no difference in quality of life both groups [34]. Skantze *et al.* [27], in a research entitled "quality of life comparison with standards of living among outpatient schizophrenia patients" showed that there is no difference between quality of life men and women [27]. The reason for different results with this study can be rooted in cultural differences and measuring tools of quality of life. Patra & Mishra [22], in a research entitles "the relationship between mental pathology and quality of life among severe schizophrenia patients" revealed that there is a difference between quality of life men and women and men have lower quality of life [22]. Gallup *et al.* [14], in a research entitled "schizophrenia and quality of life: how are symptoms and performance important?" showed that there is a difference between men and women in terms of quality of life [14]. Furthermore, other researches reached similar results various studies show that although schizophrenia outbreak is equal among both sexes, sickness trend is different among them and final results of sickness among women is better [24]. Men have worse quality of life due to more responsibilities in life as well as not following treatment and women have better quality of life because of more social support in comparison with men.

#### Key Messages:

It is recommended that other therapies be used to promote quality of life and to reduce and remove side effects of drugs. Moreover, effectiveness of these interventions in other psychological variables such as anxiety, depression, emotional intelligence and other positive and negative variables related to mental sicknesses ought to be investigated.

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**Table 1:** Levene test of Equality of Error Variances in quality of life variable

F	df	sig
.45	62	.5
	1	

**Table 2:** Summary of results from ANCOVA of variance related to score Mean of quality of life post test.

Source	Sum of square	df	Mean squared	F	sig	Partial Eta squared	Observed Power
Quality of life	8743/12	1	8743/12	312/259	.05	.83	1

**Table 3:** comparison of Mean and SD quality of life in groups of men and women.

sig	T	df	SD	Mean	sex
.00	2/7	62	10/59	44/58	man
			15/24	53/60	woman

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