

The Study of the Effect of 8-Weeks Aerobic Exercises with Music and Swimming on the Depression in Non-Athletes Woman

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ABSTRACT

This research was conducted in order to compare the effect of eight weeks aerobic exercises with music and swimming in depression in women non-athletes in age over 25 years in Jolfa. The research is semi experimental and field study by 205 sample. The questionnaire was used for determination of age, marital status, studies and ate. Beck test by validity and reliability of 89% was employed between women of Gargar and Alamdar. 75 cases of depressed patients who borders were then matched in three groups of 25 swimming, aerobic exercise with music and were controlled. The exercising were carried out for eight weeks, three 45 minutes session. Descriptive statistics were used for investigation of the data, t- test, spearman and person tests were employed. The result s, show that there is no significant relationship between age, marital status and depression. Both groups had positive effect reduction of depression. Aerobic and music showed more and considerable effect. It is recommended that physical activities use as an effective factor for reduction of the depression.

KEYWORDS: depression, aerobic exercise, swimming.

INTRODUCTION

Depressive illness which stands(DD bisorber Dysthamic)is the person always disappointment, sadness, nostalgia and frustration remained, kind thoughts and emotions and behavior that accompanied it entirely from the symptoms of the disease, which is one of the most common psychological problems the world that long has been considered in the latter decades of astonishing increased(AL-WindiA ,2005) .If this case strongly than usual field pass on the individual life and miss him from everything and everyone, even himself averse He makes and useful function reduces Mental Health and undermined family and community makes it(Dimeo ,2001., Dunn,2002). Discomfort to the extent that it is here compared with pneumonia, but they have said very little difference between pneumonia and depression exists and it is not fatal pneumonia, while the depression in some cases leading to death of. The disorder in men and women also exists, but depressed in the two women against men, and it seems that environment and mental factors play an important role chemical changes in depressed individuals brain like imbalance in nervous transmitters produce mental disorders family record, age, physical factors and psychological factors increase vulnerability(asoudi, 2001). Depression disorders involve main depression behavioral disorders, seasonal emotional disorder and depression mania or bipolar depression and depression mania or bipolar depression. 60% of individuals who commit sudden are depressed and show following indication, 1- change in weight and appetite, 2- Less or more sleeping 3- anxiety and restless 4- sever failure or fatigue or lack of energy, 5- feeling sin or valueless 6- difficulty in thinking or discussion making 7- thoughts about death. There is no treatment for one minute, one hour or one day or one month the number of depressed individuals is double tenfold in two last decades. The cost of depression is more than 16 milliard from three depressed persons one person is treated. Since people believe that depression is emotional not disclose (Neinavi, 2002). 45 minutes practice for three days a week can be effective. The physicians believe that sport and exercise optimize blood circulation and increase brain oxygen reservoirs and release andorphines and ancomphiles as ant depressed dray (MohamadiNejad, 1993). According to effective factors on treatment of depression ECT, psychotherapy, group therapy, couple therapy and phototherapy are common by side effects since treatment of depression is difficult. But physical activities,

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psychotherapy could relieve disorder and it is key for improvement (Lapinen,2000, Holcomb,1996).The research show that physical activates improve mental disorder, factice and apartment role in joyfulness of life (Martinsen, 1999,Kull,2000). Among them is the music of aerobic exercise as a way to get exercise straw used to prepare physically. This practice, which today form fun and exciting sport and have popular front in 1960 spent his early years in the year 1980 among the world's most popular sports were considered(Tobias,1996). Although aerobic exercise in terms of a lead by developing and increasing aerobic fitness and mental focus on the other hand, and intellectual development and creativity is mind, a special place among the people has acquired. Today in parts of the world Ray stirring the sport as attractive and valuable tool to lead the health and human health has been. Aerobic exercises Aerobics manner causing rhythmic performances with music, an effective means to prevent depression, impatience, and in terms of training users as a group, the rhythmic motion and canned pursue a process is effective for group behaviors (shadab,2003). Countless researches in this field has been done, shows a device suitable aerobic exercises and millet prices in reducing mild to moderate depression, and prevents it from occurring, fatigue, and away from individual case represents vitality and happiness in person is (Holcomb,1996).Swimming plays an important role in keynote of the depression and increase mental power and social commitment. The results indicate that swimming affects on mental disorders, fatigue, depressions, Life quality prevents depression. another physical activity that can be effectively reduced the role of depression, in 1991 as a research Yousefi Bhran Assessment of depression in two groups scattered student athletes and non athletes Tehran University conducted showed that the results between depressed and non-athlete student athlete there is a significant difference(Shaaban,2003). Also in the year 1993, Mehdi MehdiNejad research entitled Effect of aerobic exercise on reducing depression, adolescents 5-18 years old did the research results showed that aerobic exercise on reducing depression is effective in adolescents (MohamadiNejad,1993). In year 2007 Hassanpour impact aerobics moves eight weeks on two area women depression Khorramabad check and the result showed a significant difference between control and experimental groups are .Also maleki impact 8 weeks aerobic moves on the amount of knowledge of health sent reviews and results showed a significant difference between aerobic exercise and mental health indicators are .Research results Dilorenzo and colleagues (1999) also showed that exercise in both short and long term, not only will lead to physical, but especially the improvement of mental depression is reduced (Gaseminejad,2007). David and colleagues (2005) research as the benefits of aerobic exercise on depressed patients to evaluate the effect of short-term training program on depressed patients with moderate to severe depression did. Exercises include walking on the neck and the tape was exercises for 10 days and was done for half an hour. At the end of training program significantly reduced the depression scores of the subjects was observed (Gaseminejad,2007). Dunn and his colleagues (2002) showed that the treatment of sporting activities can be mild to moderate mental 25 to 45 years in use. Research results showed that different amounts of exercise can treat mild to moderate depression used .The results of Wilkinson and et al (2003) research indicated that activities like swimming, aerobic activities in low income and deprived areas are suitable from mental, psychical and social aspects. There are contradicted results. The author tries to investigate the effects of both activities on depressed woman upper than 25 years in jolfa(Wilkinson,2003).

METHODOLOGY

This research is quasi-experimental and field the author investigates the effect of 8 weeks swimming and aerobic exercises on depression in woman upper than 25years in Gargar and Alamder. The population of statistic of the study included all women are non-athletes. The statistic sample survey of 205 individuals were selected among woman who had meaningful sample. Methods this was the first case of a personal questionnaire to determine individual such as age, weight, marital status and education level were used .Then an Iranian test of the validity and reliability of Beck 0.89 Jabbari research and Sharif had been approved. Among women over 25 years and non-athletes Alamdar and GarGar randomly visiting homes and offices and focus, the questionnaire after the required description distributed among them after they were collected are completed. 75 cases of depressed patients who borders were then matched in three groups of 25 swimming, aerobic exercise with music and were controlled. Exercises every week for 8 weeks, 3 sessions 45 minutes and exercises based on case training program. Control group was tired of the routine of their lives to follow. In the first session subjects with low intensity exercise (50 percent maximum rate) and in subsequent weeks, the intensity (60-80%) peak heart rate did. To control the intensity of the old formula of 220 was used. HR

subjects, each session (beginning of training, between training, exercises at the end) control and subjects that were highlighted along with their activities with the same intensity. After eight weeks of exercise training again from Beck depression questionnaire subjects were assessed. And to classify the data by descriptive statistics and inferential statistics for the hypothesis, tokey test, t -test and Pearson and spearman coefficients were used.

RESULT

Table 1: comparison of depression in woman over 25 years before and after swimming.

Attribute Statistics	group	N	Mean	S.D	T	Significance
	Swimming					
Pre-test		25	22.29	6.27	2.93	1%
Post - test		25	15.23	8.67		

According to table 1 by using t-test for comparison of the pre – post testes in $\alpha=50\%$, since measured t is bigger than 2.93 so swimming can reduce depression in woman significantly.

Table 2- comparison of depression in woman over 25 years before and after aerobic exercises by music.

Attribute Statistics	group	N	Mean	S.D	T	Significance
	aerobic by music					
Pre-test		25	22.77	6.29	4.16	0.001
Post - test		25	11.23	3.17		

According to table 2 and by using t-test for comparison of pre-test and post – test in $\alpha=5\%$ sin t equals with 4.16 by $P\leq 1\%$. so aerobic exercise and music reduce depression in woman significantly.

Table 3- comparison of non-athlete woman over 25 years before and after in control group.

Attribute Statistics	group	N	Mean	S.D	T	Significance
	Control					
Pre-test		25	22.17	6.39	1.20	0.05
Post - test		25	21.40	7.35		

According to table 3 and based on t- test pre – post test in $\alpha=5\%$ since $t=1.20$, there is no significant difference between pre-test and post – test results in $P\leq 0.05$

DECISION

The aim of this research is to study depression in woman over 25 years of depression and the effects of swimming and aerobic exercise with music on it was reduction. According to prepare descriptive statistics shows that the average 35-48 women who 205 people, 66 employed and 139 homes were correlation between educational level and depression is significant. So woman with higher education show less depression, but there is no relationship between marriage age and depression. That they are not in agreement with David (2005), sheshl.(2001) palinkes (2001) and et al. they are in agreement with Alavi (2005) Gaseminejad (2007) results. The results of table (1) showed that swimming reduces depression agreed with David (2005) yusefi (1991). Hassanpour(2007), Bargi Magadam (1998), Bergrown Aven (2002), Alavi(2005) and malcki (2010) results. Based on proven results, which may exercise influence on the central nervous system causing the head while happy people. On the other hand, sports can do to increase your confidence and benefit the people of the basic problems of people with depression can help. These results are in agreement with Alavi (2005) Adamz(2007), Dan and colleagues (2002) David and colleagues (2005), Vahiyo (2008). Results of disagreement with research Aken and colleagues (2004) ,since aerobic reduces depression in these woman these results are agreement with Gaseminejad (2008) Hassan pour (2007 David and colleagues (2005), Dan and et all (2001), Martinise and colleagues (2004), sport is a cheap method side effect on depression. There results are in disagreement with Netzolider (2003) and Aken and colleagues (2004) results because of severity duration, nervous pressure and

working place. After analyzing the research findings were observed in the group mean depression eight weeks of aerobic exercise had done with the music, the test has been further reduced.

There was a reduction in mean scores of depression of swimming and aerobic group relative to control group. Mean score of depression in group with eight weeks aerobic and music decreased in post- test, Eight weeks exercises of aerobic affects on depression significantly. Maybe because as a group aerobic activity, rhythmic music is performed with The focus of activity is fundamental, because a person should rush to coordinate with other people makes the node, as well and colleagues showed that aerobic exercise leads to increased feelings of energy and fatigue is reduced (Alavi, H., 2005). Concentration plays an important role and swimming causes calm and empower physical, mental and social and improving aspects, sport can be optimal method and shows less side effects. Thus, since the findings of many researchers present findings are consistent. Aerobic exercises can be said to facilitate and reduce the role of women and depression is suggested that physical activities to treatment strategy or as a supplement or alternative methods to treat some patients with depression used.

REFERENCES

- Dilorenzo ,TM , Bargman EP.and et al . 1999, Long Term effects of aerobic exercise on Psychological outcomes, *Pre Med*, 28(1) : 75-85.
- Neinavi, J, (2000), scientific methods for treatment of depression and mental weekness sokhan khozestan puplication, Ahvaz, Iran.
- Shadab, F., natural treatment of depression, Gognus publication, Tehran. 2003.
- Dimeo F and et al. Benefits from aerobic exercise in Patients With Major depression ".2001, *Br.J. Sport Med*, 35(2): 114-117.
- Dunn A.L . Trivedi MH .and et al. 2002. The dose – response study : a clinical trial to examine efficacy and dose response of exercise as treatment for depression .control cline .*Trials* 2002 , 23(5) : 558-603.
- Masoudi, F., 2001. Aerobic exercises. Iran Islamic republic psychical education ministry publication, p:2-4.
- Mohamadinejad, M. 1993 investigation of aerobic effects on reduction of depression in teenager 15-18 years in Tehran ,M.A thesis, Tehran teacher education university, Tabriz, Iran.
- Gaseminejad, A., the effects of eight weeks exercises aerobic on woman depression, Ahavaz University, 2007, motion publication.
- Wilkinson, J., Philips Sand et al . 2003. Med for Fitness : an exercise group to combat a high incidence of postural depression " , *J Fam Health care* : 13(2)
- Martinsen, E.W.A. Hoffart and O.Y. "Aerobic and non-aerobic froms of exercise in the treatment of anxiety disorders". *Solberg* .1999.*Stress Med*. 5: 115-120.
- Kull, M, 2000. Risk groups of physical in activity and relationship of in activity with mental health of woman, outcomes health promotion, *Stress Medicine*,8(2):93-98.
- Lapinen, P.R.L. heikkinen and I .2000.Changes in intensity of physical exercise as predictors of depressive symptoms among older adults: an 8 years follow up. *Ruppila Prev.Med*.30: 371-380.
- Shaaban,K.M.A. 2003.A community study of depression in adolescent girls:prevalence and I Ts relation to age. *Medical Principles and Practice*. 12: 256-259.
- Holcomb,W., Stone.LS., 1996.Screening for depression in pregnancy.characteristic of the beck depression inventory.*Obstetric & Gynccology*, 88(6):1021-1025.
- Tobias,S. 1996. Anxiety research in educational psychology.*Journal of Education Psychology*. 7: 573-582.
- AL-WindiA . 2005. Depression in general practice .*Nord J. Psychiatry*. 59(4);272-277.
- Chen,R,Wei ,L. 2005.Depression in older people in rural china. *Arch Intern Med*. 165(17):2019-25
- Alavi, H., 2005 study of effect of physical activities on depression and drug there. Motion publication, Iran.