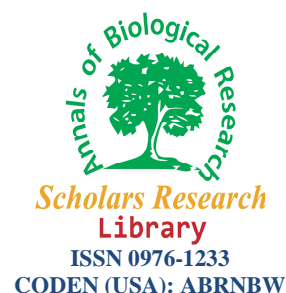




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Effect of physical activity on elder men's general health status

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ABSTRACT

As the percentage of the world's elder population continues to increase, the most serious problems that becoming epidemic in the world are behavior and mental derangements. These problems are growing in developing countries especially in Iran. So it seems that doing exercises and physical activities are one of the effective factors and solutions that should be taken under consideration in order to increase the level of general health. Therefore goal of this study is surveying the situation of active and inactive elder men's general health level in Isfahan city. This study has an expose facto method and for these purpose, 95 elder men upper than 55 years old were chosen from Isfahan Rajae Park's randomly as statistical sample. They divided into two elder groups by their physical activities, 'active elder' and 'inactive elder'. We use of general health standard 28 questions questionnaire as our Instrument in this study. Findings show that active elder have a lower grade in all four scales: physical sign, agitation sign and sleeping derangement, derangement signs in social behaviors and disappointment sings(active elder: 3.25, 4.40, 6.19, 2.10), than inactive elder (4.39, 5.60, 6.60, 3.36). Thus we can say general condition of active elder was better than inactive elder. Exercises and physical activities have positive effect because by exercising their mind become far away from problems and failures of life. So it is ordinary that reputation of exercising and being far from negative opinions could have positive mental affect and progress to other aspect of life. Therefore, it is necessary to pay attention to elder's physical activities. Also, it is suggested that the related society who are in charge of elderly affairs make appropriate exercise facilities for older people in order to increase the level of health status among senior society.

Keywords: general health, active and inactive elder ,old age ,physical activity

INTRODUCTION

The world population is aging, it is predicted that by 2025, two-thirds of people over 65 years live in the developing countries [1].

Iran is now behind changing demographics, according to 2006 Census, with more than 7.27 % of elderly age over 60 years, the country has been facing up to ageing and by the 2021, it will be increase to 10.7 percent [2].

With attention to living machine and the advancement of technology and considering the health problems of the elderly and after retirement issues, it seems to protect public health and mental health of the people is important.

The World Health Organization defines health as "a state of complete physical health, psychological, social, and not just the absence of sickness or disability." In fact we can say that one of the goals of public health, to provide a reasonable opportunity for each individual human life, the human who spent in complete safety in physical, psychological, and social situation [3].

People to achieve their overall health in addition to physical health, need to have mental health. Also the World Health Organization, mental health as one of the principles of primary health care has been on the agenda of Member States [4].

Physical and mental health in old age, far more at risk than other periods of life. In the present age, mental and behavioral disorders one of the common and serious problems in the world. According to studies, the prevalence of mental disorders in developing countries is increasing, especially in Iran. Perhaps partly due to the increase in population growth, social transformation, expanding urbanization, family life and economic problems attributed to ineffective [5].

Many approaches to Press campaign to promote mental and general health of various segments of the population such as cognitive status, leisure and entertainments (sports and participate in events), get enough sleep, cooperation and altruism, participation in the work of others, and enjoy the experience the job has been presented [6].

It is clear that mental illness is not limited to a particular class, but also includes all classes of society. However, most researchers have been confirmed that exercise can be a way to promote public health.

Significant effect of physical activity on health is so that The McCrindle et al (2007) based on their research showed that the decline in public health in young people and the elderly relegated to reduce their level of physical activity is associated [7].

Physical activities are one of the factors that are important in human health. In recent years, in Parallel with general decrease in mobility and physical activity, significant increase in mortality and morbidity due to cardiovascular disease has been among the different classes of industrial and developing countries. Accumulating evidence indicates that the prevalence of neurological and psychiatric disorders and diseases in the world today.

Many people enjoy the convenience and comfort of the car, several organic problems and adversity, muscle and joint suffer these side effects and the influence of technology in our lives today is increasing day time days [8].

Motor activity and sport and their positive effects on human health, the key research topics that are closely with other life activities. The results Anbari and colleagues (2012) showed that the proposed model eight weeks sport had no significant effect on the general health of male workers [9].

Few clinical studies on the one hand, and contradictory and ill-coordinated results of these studies on the other, It is somewhat difficult to the conclusion that exercise is a potent variable has a positive effect on public health..There is no doubt that further studies are needed to elucidate this issue.

But since that it seems to sport and physical activity as a convenient and effective solution could be to promote public health. This study is intended to describe the general health of the elderly man and to investigate the relationship between physical activity and exercise and general health of more active role as an important variable to consider.

MATERIALS AND METHODS

This study was a descriptive, causal comparative that is trying to make the case that there are issues to describe. Questionnaire used in this study is the 28-item General Health Questionnaire.

In the GHQ-28 the respondent is asked to compare his recent psychological state with his usual state. For each item four answer possibilities are available (1-not at all, 2-no more than usual, 3-rather more than usual, 4- much more than usual). In the study the Likert scoring procedure (1, 2, 3, and 4) is applied and the total scale score ranges from 28 to 112. The higher the score the poorer the psychological well-being of the patient.

Given that the purpose of this test is to identify the dimensions and physical symptoms, symptoms of anxiety and sleep disorders, symptoms, social dysfunction and depression symptoms were assessed and also used in more than 70 countries, and given the small number of questions and the response time is too short questionnaire.

Statically society

Statically society of this study includes elderly active and passive in Esfahan parks.

90 healthy elderly people that who did not have any particular problems that lead to consumption certain drugs volunteers were selected as statically sample. And divided in two group, the active group (n = 45) and inactive (n = 45) groups.

Person aged at least 3 hours per week of physical activity have been active elder And those who have not had a week in any physical activity are sedentary elder people.

If people even 1 or 2 hours a week of physical activity performed in any of the groups were not and were excluded from the study.

Data analyze

The data collected were analyzed using descriptive. In order to organize and to summarize and classify the raw score and Describe Descriptive statistics and sample size an frequency, percentage, mean used.

RESULTS

Information on general health scores four somatic symptoms that included physical symptoms, anxiety and sleep disorder symptoms, social dysfunction and depressive symptoms are presented in table 1.

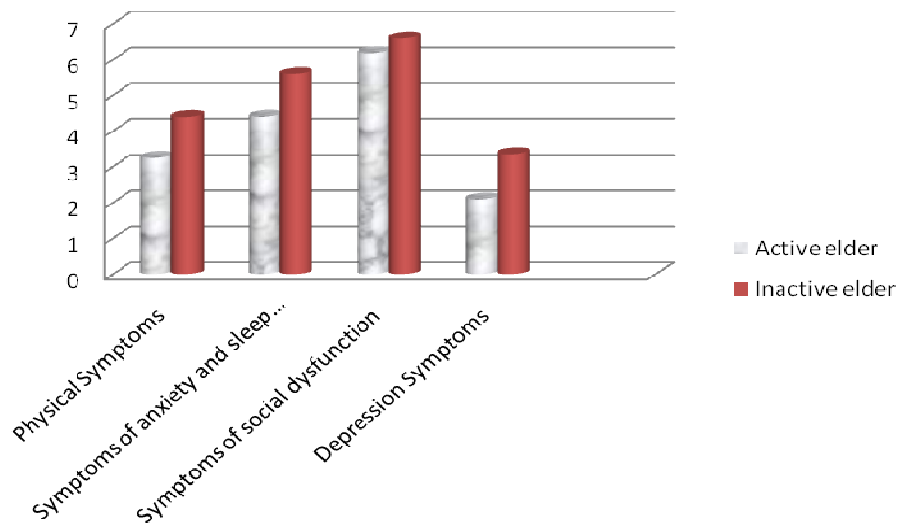
Table1. Mean of Scores of active and inactive subjects in the multiple scales of public health

	Physical Symptoms	Symptoms of anxiety and sleep disorders	Symptoms of social dysfunction	Depression Symptoms
Active elder	3.25	4.40	6.19	2.10
Inactive elder	4.39	5.60	6.60	3.36

Table (1) indicates that the most active senior's social dysfunction symptom score and the lowest score was given to depression. According to those in the best condition and the symptoms of depression and social dysfunction are the worst. And among the most disabling symptoms of social dysfunction score and the lowest score was given to depression. According to those in the best condition and the symptoms of depression and social dysfunction are the worst.

Figure (1) shows that Active seniors scored lower were inactive in all four measures of physical symptoms, symptoms of anxiety and sleep disorder symptoms, social dysfunction and depression Active seniors scored lower were inactive.

Based on the results cleared that general health of the active elder better than an active elder. The most active subset of the general health of the elderly, active elder better than an active elder.

Figure 1. Comparing the scores of the four public health in active and inactive subjects

DISCUSSION

Almost everyone believes that health benefits of physical activity are not only on physical, but also physical activity on general health in general and mental health in particular affects.

According to the results we can say that the total score of the general health of the active elderly lower than inactive elderly people. And given that the lower level is at grade level, meaning that a person's overall health is better, therefore, active seniors have better health than older adults are inactive.

Based on the results, the general health of the active elderly, better than inactive elderly. Also, most of the general health subscale of somatic symptoms, anxiety and sleep disorders, depression and social dysfunction symptoms active seniors are better than inactive seniors.

Today, research on the effects of exercise on reducing psychological stress has been proven that exercise can be used as a process to reduce stress. For example, most people who work in rehabilitation systems, Believe that the psychological benefits of exercise are good, especially improve anxiety and depression and also can cause a person to feel good improves [11].

According to what was said, mental health one of the factors that affecting the mind. As mind affects on the body, body may also have significant effects on the mind. Studies have shown that vigorous physical activity to reduce anxiety, depression, increased self-confidence and self-esteem leads, so Exercise and fitness may thus have a positive impact on mental health [9].

The results of several cross-sectional consist of 159 studies, showed that exercise significantly reduces anxiety and depression [12, 13 & 14]. A meta-analysis of research on the effects of exercise on sleep showed that Exercise resulted in a significant increase in total sleep time and also more relaxed in sleep [15].

In this regard, the findings of researchers such as Marshall *et al* (2005) and Ferezza and colleagues (2007) showed that physical activity plays an important role in promoting population health [16, 17]. Result of Research on the impact of individual and group exercises by Fontaine (2000) shows that the improvement in mental health, reduce in anxiety and depression is to engage in individual and group exercises [18].

Bize *et al* (2007) in a study surveying the effect of the level of physical activity and quality of health in adults. The results showed that the general health of adults influenced of the levels of physical activity. And the amount and level of physical activity as more people enjoy more public health [19].

Eurenius et al (2005) concluded that based on the findings of its review The people of most fitness and activity levels are higher than those of other public health better and more favorable [20]. Present results agree with the results of many studies in this field such as: Mc Crindle et al (2007), Bize et al (2007), Cheng et al (2008) and Buchner and colleagues (2009). They demonstrated that physical activities and exercise induce reducing symptoms of depression, anxiety, mood disorders and increased general well-being, improved mood, sense of well-being and overall health is improving [7,19, 21, 22]. In contrast to other similar studies in different statistical populations may be inconsistent. For example, research findings, with the Anbari and colleagues (2012) and Lennox and colleagues (1990) reported that exercise had no effect on public health, is not in agreement [9, 23].

Some researchers believe that exercise and physical activity have a positive psychological effect because Leads to mind, especially when Engagement in sport, away of the difficulties and frustrations of life. It is normal that repeat the exercises can induce psychological effects and related problems can be transferred to other aspects of life [24]. According to Agree and disagree literature, we can guess that Although this research showed important and valuable result About the effects of physical activity on health , however ,It seems other factors such as stoical sample, and type of physical activity may be the behavior of the individual researcher and the subjects and also of the questionnaire outcomes is involved.

So that the difference in results, Gail (2004) states that such, these differences in results due to differences in study methods used, the number and type of participants, type of exercise and is a measure of the difference in means [25]. Literature review indicated that more evidence is now available that confirms the relationship between exercise and improved health. Particularly in the areas of anxiety and depression, these studies show that exercise alone will not reduce depression and anxiety. It seems to have increased self-esteem, improves mood, sleep and mental stress also is quick to return.

This finding not only based on the results of a study, but also based on several studies and meta-analysis.

The overall pattern of the study and meta-analysis shows that exercise can play an important role in promoting public health. There are many benefits to justify this opinion. According to experts, psychiatrists, and International Institute for Mental Health, Sport and Physical activity has a positive effect on mental health.

According to the survey, there is a positive relationship between physical activity and body image and satisfaction from enjoy of physical activity on life .may the sense of satisfaction and pleasure, spread to other aspects of life [26].

CONCLUSION

It is be clear that physical activities could have a significant Influence on improvement of general health [27, 28, 29&30].overall, the present study examined the characteristics of the general health of some elderly, but must admit that to get a more accurate answer to the question of how and to what extent physical activity and exercise are effective in providing public health nursing. And whether they can engage in regular physical activities with crises and problems related to old age and new life styles today have to deal, require more extensive investigations and studies at national level.

REFERENCES

- [1] Ravaglia G., Forti P., Sacchetti L. *Dementia and Geriatric Cognitive Disorders* **2002**; 14, Iss. 2, 90-101.
- [2] Momeni KH, Karimi H. *Journal of Ageing*.**2010**;N(10),P:23-29. [Article in Persian].
- [3] Norbakhsh P. Variability and build tools for measuring job stressors physical education teachers in the province and the relationship between these factors and mental health.Thesis in PhD in physcia education.Tarbiyat Moallem University.**2000**. [Article in Persian].
- [4] Asadzandi M, Sayari R, Ebadi A, Sanainasab H. *Mill Med J*. **2009**; 11(3):135- 41. [Article in Persian].
- [5] Ahmadi Z, Sahbayee F, Mohammadzade AH, Mahmoodi M. *Islamic Azad University Journal of Medical Sciences*.**2005**;17(2):107-111. [Article in Persian].
- [6] Abtahi H. *Journal of Knowledge Management*.**1990**: 70-80. [Article in Persian].
- [7] McCrindle. BW. Williams, RV., Mital, S.; Clark, BJ., Russell, JL., Klein, G. and Eisenmann, JC. "Physical activity levels in children and adolescents are reduced after the fontan procedure, independent of exercise capacity

- and are associated with lower perceived general health, archive of diseases in childhood". **2007**. Vol. 92, No. 6, pp: 509-514.
- [8] Eshraghi H, Kashef MM. *Sport Biosciences*. **2009**; 2:111-128. [Article in Persian].
- [9] Anbari SH, Moghadasi M, Torkfar A, Rahimi S, KHademi Y. *Bring knowledge Journal*. **2012**; 17(1):40-49. [Article in Persian].
- [10] MC Donald, D.G., Hodgdon, J.A. The psychological effects of aerobic fitness training: Research and theory. New York: Spinger-verlage. **1991**.
- [11] Godin, G. *Cardiopulm Rehabil*. **1989**, 9-223.
- [12] Calfas, K, J.Taylor, W.C. *Pediatric Exercise Science*, **1994**. 6, 406-423.
- [13] Kugler, J., Scelback, H., Kruskemper, G.M. *British Journal of Clinical Psychology*, **1994**. 33,401-410.
- [14] Long, B.C, Van stavel, J, P. *Journal of Applied sport psychology*. **1995**. 7, 167-189.
- [15]. Kubitz, K.K, Landers, D.M., Petruzzello, S.L., Han, M.W. *Sports Medicine*. **1996**. 21(4), 227-291.
- [16] Marshall, Alison. L.; Booth, Michael. L. and Bauman, Adrian, E. *patient education and counseling journal*. **2005**. Vol. 56. Issue. 3. Pp: 283-290.
- [17] Ferezza, EE: Shebani, KO., and Wachtel MS. *Journal of laparoendoscopic and advanced surgical techniques*. **2007**. Vol. 17, No. 4, pp: 440-447. [Article in Persian].
- [18] Fontaine, K.R. *Journal of physician and sports medicine*, **2000**. Vol. 28, No. 10.
- [19] Bize, R., Jeffrey, A.J. and Ronald, C.P. . *preventive medicine journal*. **2007**. Vol. 45, Issue 6, pp: 401-415.
- [20] Eurenus, E. and Stenstrom. CH. *Arthritis and rheumatism journal*. **2005**. Vol. 53, No. 1, pp: 48-55.
- [21] Cheng, CY. And Li, Q. "Integrative review of research on general health status and prevalence of common physical health conditions of women after childbirth, womens health Issues". **2008**. Vol. 18, No. 4, pp: 267-280.
- [22] Buchner, D.M. and Schmid. T. *American journal of preventive medicine*. **2009**. Vol. 36, Issue 2. pp: 44-46.
- [23] Lennox.ss; bedell.YR; stone.A.A. the effect of exercise on normal mood, psycho Som. Res. **1999**.3496):629-36.
- [24] Aslankhani MA. Evaluation and comparison of the psychological characteristics of students both male and female athletes and non-athletes. Research study. Shahid Beheshti University. **1998**. [Article in Persian].
- [25] Gail. Regan. "Functional fitness and lifelong activity as predictors of health in a group of community dwelling older adults". Health sciences, Kansas. **2004**.
- [26] KHabiri M. Survey the Reduce anxiety and depression through exercise and physical activity. Proceedings of the Congress of Sport Medicine Perspective. **1992**. [Article in Persian].
- [27] Abdolhamid Habibi, Mohammad Rami and Abdolkhalegh Nasiri Panah. *Annals of Biological Research*, **2012**, 3 (7):3292-3296.
- [28] Hesam Eshraghi, Mir Mohammad Kashef, Kazem Mehri. *Annals of Biological Research*, **2012**, 3 (2):899-907.
- [29] Mohammad Pourranjbar, Hosain Poursoltani, Mohammad Rasoul Khodadadi and Behrouz Ghorbanzadeh. *Archives of Applied Science Research*, **2012**, 4 (1):623-631.
- [30] Ali Mostafai. *Annals of Biological Research*, **2012**, 3 (5):2144-2147.