

A STUDY IN TERMS OF SOCIAL MARKETING APPROACH: THE EFFECTS OF PHYSICAL ACTIVITY ON QUALITY OF LIFE IN ELDERLY

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Abstract

This study which was carried out, in terms of social marketing approach, has the purpose of investigating the effects of physical exercises on aged 65 years and over people on quality of life.

In this study, a campaign, in social marketing scope was organized and it was advertised by flyers aim to determine the effects of physical activities on life quality of randomly selected volunteer men, above 65 years old who stay in Mugla Abide-H.Nuri Öncüer Senior Center. Moreover, a presentation about physical activity and quality of life was submitted and informed about the programme to 57 senior center participants. The photo and slogan was used and prepared as a flyer to create an effect on participants for this campaign. These flyers were given to participants before the study and waited one week to create awareness about to study. The survey was made and the study was started a week after the flyers were given to participants. The exercises were continued during 8 weeks. The SF 36 quality of life scale, its validity and reliability studies were investigated by Pinar (1996) and Demirsoy (1996), was made under the supervisor of three trainer to randomly selected 27 person from senior center.

The results of pre-test and final-test were determined by using SPSS 18 software. As a result, %47 of participants who were impressed from Social marketing programme decided to participate to this study. There were significant differences in some variances (subscales) like physical function, body pain, general health, social function and physical health when compared before and after programme.

Keywords: Elderly, Social Marketing, Quality of Life.

SOSYAL PAZARLAMA YAKLAŞIMI AÇISINDAN BİR UYGULAMA: YAŞLILARDA FİZİKSEL AKTİVİTENİN YAŞAM KALİTELERİNE ETKİSİ

Özet

Bu çalışma, sosyal pazarlama yaklaşımı açısından bir uygulama olarak, fiziksel aktivitenin 65 yaş ve üzeri erkek bireylerin, yaşam kalitelerine etkilerinin araştırılması amacıyla yapılmıştır.

Muğla İli Abide-H.Nuri Öncüer Huzurevinde yaşayan 65 yaş ve üzeri seçilen gönüllü erkek bireylerin sosyal pazarlama kampanyası sonucu, fiziksel aktivitenin yaşam kalitelerine etkisini belirlemek amacıyla, sosyal pazarlama kampanyası düzenlenmiştir ve bu kampanya broşürler vasıtası ile duyurulmuştur. Aynı zamanda, Beden Eğitimi ve Spor Yüksekokulunda çalışan 2 Öğretim Elemanı tarafından, huzurevinde kalan 57 kişiye, fiziksel aktivite ve yaşam kalitesi ilişkili sunum yapılmış ve program hakkında bilgi verilmiştir. Kampanya için katılımcılarda etki yaratacak bir resim ve slogan (hareket et mutlu kal) kullanılarak, el broşürü haline getirilmiş, huzur evi sakinlerine çalışma öncesi dağıtılmış ve farkındalık yaratması için bir hafta beklenmiş, bir hafta sonra kampanyadan etkilenen ve gönüllü olarak katılmak isteyen 27 kişiye anket uygulanmış ve çalışma başlatılmıştır. Egzersizlere 8 hafta boyunca devam edilmiştir. Huzurevinden seçilen gönüllü 27 kişiye, çalışmanın başında ve sonunda, SF 36 Sağlık Durum Anketi (Short Form) eğitmenler eşliğinde uygulanmıştır. Ön-test ve son-test değerlerinin sonuçları kişisel bir bilgisayarda, SPSS 18 paket programı ile değerlendirilmiştir.

Sonuç olarak; Geriatrik erkeklerden % 47.36'sı sosyal pazarlama programından etkilenecek çalışmamıza katılmıştır. Programa katılanların, bedensel, psikolojik ve sağlık durumları, program öncesinde ve sonrası karşılaştırıldığında; fiziksel fonksiyon, vücut ağrısı, genel sağlık, sosyal fonksiyon ve fiziksel sağlık değerlerinde anlamlı farklılıklar ortaya çıkmıştır.

Anahtar Kelimeler: Yaşlılık, Sosyal Pazarlama, Yaşam Kalitesi.

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INTRODUCTION

This study was conducted to investigate the effects of physical activity on quality of life of the male at the age of 65 and over as an application in terms of social marketing approach. Some informative campaigns should be held and organized which will explain the importance and benefits of physical activity and reduce false information and turn them into right and development of cognitive component should be provided during the orientation and consciousness raising stage for elderly people.

The most important concept developed during 21st century is "Ageing of Societies". Developments within the triangle of medicine, science and technology and reduction in birth rates formed and constituted the cornerstone during this process. Today, it is estimated that there are 146 million people who are at the age of 65 and over and living in the developed countries of the world and this age group is estimated to be around 232 million in 2020 and predicted to reach 1,4 billion in 2030 (Kutsal, 2010). Geriatrics science is a branch of science that is shaped and developed in line with the health needs which often cannot be solved only by one branch of science and interested in increasing elderly population as a result of 20th century and refers to people at the age of 65 and over (Aydın, 1999). Old age is defined as the age of 60 years and over. This age is a period of time which individuals approach the end of their work and business lives, make retirement plans or retire, end their responsibilities of adulthood so end of their tasks and duties of adulthood period. Therefore, some important losses and changes of role take place in lives of individuals related to ageing and some positive and negative results occur as a result of these changes (Erden and Aki, 2010).

Decrease in physical capacity of people is an inevitable result of biological ageing. Damages occur in most of the biological functions with ageing in time. Decrease in strength and endurance is seen because of the change in information processing capacity of the nervous system. Elderly people benefit from regular exercise regardless of their age and physical condition. Life expectancies of individuals who had almost never made exercise in their life increase moderately when they start to do regular exercise up to their ages of seventy five (Savaş, 2010). So, the fact that regular exercise is accepted to be an effective tool to improve health awareness and the quality of life that interest related to this issue is continuously increasing, today (Akandere, 2007). Physical activity and exercise is the sum of the movements that improves the health of individual, maintains the improved condition of individual and increases the resistance of individual to fatigue and illnesses as a tool of preventive health approach. Lack of exercise and low level of physical fitness are very important risk factors for illnesses and premature deaths (Özer and Baltacı, 2008).

Measures of quality of life have gained an increasing importance in the area of rehabilitation and medical literature in recent years and the quality of life has become a term that contains a wide variety of results (Arslan and Kutsal, 1999). Cognitive, emotional, social and physical functions should be assessed together when the quality of life is assessed for elderly people. Quality of independent daily life activities of elderly people directly depend on their general health status and walking speeds (Keskin et al., 2008). Individuals need to comprehend the healthy living consciousness and then adopt and interiorize positive behaviors by paying attention to their life styles and avoiding behaviors which may constitute harm or

damage for themselves. Therefore, determination of attitudes of these people in the issue of exercise and change in their behaviors in line with these existing behaviors should be aimed.

Social marketing understanding provides for an approach that protects, continues and improves the health of individuals and society. This understanding is based on individuals to gain behaviors which will maintain and develop the well-being of individuals and society and understanding of taking right decisions about their own health status. Health improvement works aim to pick up, fix, check the health of both society and people and to provide full health potential for them. Thus, development of healthy lifestyle awareness and improvement of lifestyle for individuals, in other words, individuals to adopt health protective and improving behaviors by avoiding risky behaviors is expected as a result of their understanding to percept the protection of their health is their duty (Argan and Akyıldız, 2010).

Social marketing is defined as "analysis, planning, implementation and assessment of programs designed to influence a behavior that exists in target audience with the purpose of improving health of individual and society by using traditional marketing methods" (Bright, 2000). Marketing activities that are organized in order to make the society to adopt a social idea or opinion and create a positive behavior change in this issue, are included in the scope of social marketing (Ünal, 2009). The marketer will met with persons and groups who are uninterested and opponent or unconcerned to sports in sports marketing in terms of social marketing. Marketing is a process of change (Kotler and Armstrong, 1989). The task of sports marketer is to convince these people to participate in sports and provide the necessary opportunities for their participation. However, living conditions,

environmental factors, motivational factors and demographic status of such persons and groups which effect their decision of participation are needed to be analyzed in detail (Seraslan, 1990).

METHOD

This study was conducted to research the effects of physical activities, as an application in terms of social marketing approach, on the life quality of the male at the age of 65 and over. The study has certain restrictions since the senior center subjected to the study is the only one in the city, its accommodation capacity is low and there are elderly people who cannot participate in the program due to their health problems.

Sample Group: Research group is composed of elderly men at the age of 65 and over accommodating in Abide - H. Nuri Öncüler Senior Center in Muğla. The social marketing campaign was announced through flyers. A photo and a slogan (Move and Be Happy) that is thought to have impact on participants were found and the flyers were prepared accordingly. The flyers were distributed to 57 participants of the senior center and waited for a week to create awareness about the study. During this process, a presentation concerning physical activity and life quality was made to 57 elderly people living in the senior center by 2 instructors working in the School of Physical Education and Sports and they were informed about the program and their questions were answered. When it's considered that 12 of the elderly people are in the department of rehabilitation and 7 of them are not able to participate in the activities, it was determined that 19 elderly people wouldn't participate in the program. The slogan "Move and Be Happy" on the flyers was used for happy elderly people and physical activity theme. One week after the flyers had been distributed, a survey was conducted on 27 people who were

influenced by the campaign and wanted to participate voluntarily. Information concerning the health status of 27 elderly men was received and they participated in our study voluntarily. The study was limited to 8 weeks. Exercises were taken by the participants 40 minutes a day, two days a week in company with 3 trainers. The participants took warm-up exercises for 10 minutes, theraband exercises and physical activity for 20 minutes and cool-down exercises for 10 minutes.

Data Collection Tool: In this study, SF-36 Short Form was used as life quality scale to determine the effect of 8-week physical activity program, to which the individuals had participated voluntarily after social marketing campaign, on the life quality of the elderly men at the age of 65 and over living in Abide - H. Nuri Öncüler Senior center in Muğla. The scale of which validity and reliability (Cronbach Alfa value .88) study in Turkish society was carried out by Koçyiğit et al. (1999) is composed of 36 items and these items enable the measurement of 8 sub-dimensions (physical function, physical role, body pain, overall health, vitality, social function, emotional function and mental health). Besides, physical health that consists of the sum of physical function, physical role, body pain, overall health, vitality, social function and emotional function was handled and evaluated. Sub-dimensions evaluate the health

between 0 and 100 that 0 shows the worst health status and 100 expresses the best.

Data Collection: In addition to the surveys, detailed information concerning health status of the participants was obtained and an exercise program was prepared by experts accordingly. Exercises were taken 40 minutes a day, two days a week in company with trainers. SF-36 life quality scale survey was conducted on 27 volunteers in the senior center by talking to them face to face in accompany with the trainers one week before the exercises had started and one week after the exercises had ended.

Statistical Analysis: The results of pre-test and final test were evaluated in SPSS 18 package software in a personal computer. The results of pre-test and final test were compared in paired-samples t test. The data was summarized by arithmetic mean and standard deviation values. The difference was assumed significant when the P value was lower than 0,05.

RESULTS

Analysis results obtained from paired-samples t test were discussed and comparison of data of pre-test and final test values of SF 36 quality of life scale presented in this section in form of tables.

Table 1. Arithmetic Mean Of Participants In Terms Of Age, Height And Weight

Variables	N	Arithmetic mean	Standard Deviation
Age (Years)	27	77.28	7.79
Body weight (Kilograms)	27	74.17	13.18
Height(cm)	27	1.67	0.07

Table 2. Analysis of Sub-Dimensions Of The Sf-36 Scale of Quality of Life with Paired T-Test

SF-36 Sub-Dimensions	Pre-test (N= 27)	Final test (N=27)	t	p
	$\bar{x} \pm SD$	$\bar{x} \pm SD$		
Physical Function	46.07±6.8	31.07±5.6	6.25	0.00*
Physical Role	46.42±8.8	50.89±9.4	-2.72	0.96
Body Pain	48.21±5.3	51.78±4.0	-2.42	0.22*
Overall Health	53.75±4.0	47.14±3.9	5.88	0.00*
Vitality	54.10±3.7	55.00±3.4	-0.73	0.47
Social Function	60.53±4.2	64.07±4.3	-2.09	0.04*
Emotional Function	51.21±8.3	48.82±8.6	1.00	0.32
Mental Health	53.42±2.0	58.42±3.5	-1.28	0.21
Physical Health	49.71±4.6	47.17±4.3	2.27	0.03*
SF-36 Total Score	48.42±2.2	51.25±4.4	-0.71	0.81

*p<0.05

Sub-dimensions of quality of life was analyzed by paired t test and statistically significant differences were observed in the variables of physical function (t=6.25,

p<0.05), body pain (t=-2.48, p<0.05), overall health (t=5.88, p<0.05), social function (t=-2.09, p<0.05), physical health (2.27, p<0.05) among these.

Table 3. Analysis of Total Score And Physical Health Total Score of The Sf-36 Scale of Quality of Life With Paired T-Test

Variables	Pre-test (N= 27)	Final Test (N=27)	t	p
	$\bar{x} \pm SS$	$\bar{x} \pm SS$		
Physical Health	49.71±4.6	47.17±4.3	2.27	0.03*
SF-36 total score	48.42±2.2	51.25±4.4	-0.71	0.81

*p<0.05

A significant difference could not be found in the variable of physical health consisting of the sum of physical function, physical role, body pain, overall health, vitality, social function and

emotional function statistically and also a significant difference could not be found for total score of SF-36 the quality of life scale even if there is an increase in the positive direction.

DISCUSSION

A social marketing campaign related with quality of life and physical activity was organized for the male at the age of 65 and over living in Muğla Abide-H. Nuri Öncüler Senior center within the framework of this study in order to investigate and research the effect of physical activity to quality of life of the male as an application in terms of social marketing approach and 46, 36% of elderly people participated in our study voluntarily by being affected from social marketing program.

Success of 47, 36% may not be considered as an important success when assessed in terms of social marketing. However, when 12 elderly people in the department of rehabilitation of the senior center and 7 elderly people who are not in a physical status to be able to join the activities taken into account, it can be seen that 27 of 38 elderly people participated in our study voluntarily. From this perspective, it is seen that 71% of elderly people participated in our study. From another perspective, the facts that the senior center is the only one in the city which

we conducted our study and the housing capacity is low and our number of subjects are limited constitutes the limitations of our study. It was seen that elderly people who did not participate in the program, were unwilling in terms of participation and physical activity. This situation may be connected to many different factors. The life satisfaction levels of elderly people accommodating in Mugla Senior Center were determined according to life satisfaction scale as follows in another study: 2% of them were very good, 60% of them were good, 28% of them were bad and 10% of them were very bad. It is inevitable to confront problems more often related to ageing every day due to the increase in elderly population. Some of these problems result from the physical, mental and economic conditions of elderly people and some others result from environmental conditions other than their own problems. Social policies that implemented by countries and governments, social society laws, in other words, understandings of social state reduces or increases the problems of elderly people which they encounter during their old age (Oktik, 2004). It was stated that 38% of elderly people living in our country look to the future with despair and mostly complaint about loneliness according to the findings of Turkey First Gerontology Atlas (Gero-Atlas) Study. 55% of the participants of the study told that they are abstracted and excluded from the society and 42% of them told that they want to die (Kurt et al., 2010). It becomes difficult to orientate elderly people with low life satisfaction and who look future with despair to any activity. Unwillingness of non-participating elderly people is believed to take its source from these kinds of reasons.

Since the time when marketers realize that thoughts and behaviors are marketable such like products and materials, social marketing continues to

produce successful solutions in its field. Studies that have been carried out in recent years, demonstrate that people and individuals need to be convinced to be oriented and directed to regular sports behavior and reveal regular sports behavior. A special effort is required for this conviction. Social marketing is believed to be an appropriate process for a large part of these efforts (Çoknaz, 2004). It may be argued that elderly people in our country need more comprehensive social responsibility projects which must be carried out by the state and private sector to enhance their quality of life. Cognitive component should be provided and supported to be developed by organizing informative campaigns which will reduce wrong information and convert them to the right and describe and explain the importance and benefits of physical activity during the orientation and consciousness raising phase and process of elderly people. It is thought and believed that support of well-liked people by the public can increase the effect of campaign messages. The state, civil society organizations, private companies and media should make new expansions by working all together for to increase the awareness of the sports consciousness of the society and to put "physical activity" on the requirement list of Turkish people. The media is expected to display sensitivity regard to raise awareness and consciousness in the society about the importance of physical activity.

As a result of a social marketing campaign of Keller et al. throughout USA based on states in 1998; it is stated that the awareness about physical activity increased in the rate of 40% for individuals between the ages of 50 and 70 and the number of people who says that they feel better increased in the rate of 55%. It is stated in this study that researchers told participants that physical activities are not only those which they do just in sports halls with

sweating but also they can perform physical activities in their daily life and make them enjoyable and awareness was created and positive results were obtained as a result of this study (Kotler et al., 2002). The beginning point of our study shows parallelism with this study. It was aimed to create awareness about the issue of physical activity and increase quality of life of elderly people through social marketing campaign. Awareness was created in our study in this sense and significant differences could be found in some dimensions of quality of life statistically despite the fact that our study had been limited with 8 weeks. Stopping regression in geriatrics may be considered positive and meaningful and significant although there is no significant difference in SF 36 total score statistically.

Quality of life is a phenomenon inversely proportional to age. It is seen that there is a fall in scores of quality of life in conjunction with the increase in age in the conducted studies. Birtane et al. (2000) reported that quality of life of at total of 96 old age individual consisting of 21 females and 75 males accommodating in senior center reduces as a result of their study aims to examine factors affecting the quality of life of elderly people. Çalıştır et al (2006) determined in their study which examined quality of life of 1047 old age individuals living in Muğla Province Center that quality of life reduces with increasing age. The importance of physical activity started to be emphasized more in recent years in order to remember old age individuals that they are a productive part of society, to reduce their disabilities, injuries and illnesses caused as a result of ageing and to provide an independent life for them. Physical activity underlies many programs organized for to reduce the risk of falls and can work with strength, balance and other physiological and

psychological ways and methods (Soyuer et al., 2012).

Gülseren et al. (2000) determined a significant relationship between age and quality of life as a result of a comparison made between 20 elderly people living in their own homes and 30 elderly people accommodating in senior center in their studies in terms of cognitive functions, mood disorders, depressive symptoms levels and quality of life. However, Gagnon et al. (1994) stated that there is not such kind of relationship for population at the age of 70 and over and functional status which is an important determinant of quality of life decreases with ageing in their study.

Some significant differences in the value of $p < 0,05$ were found according to pre-test and final test results between the values of physical function, body pain, overall health, social function and physical health for these participants. It is thought that regular exercises are beneficial for their health-related physical activities and have positive impact on their quality of life according to these data. Soyuer (2008) stated the benefits of physical activity in improving quality of life and providing functional independence for elderly people in their study which shows parallelism with our study and added that exercises within the context of physical activity recommended for elderly people must include aerobic, muscle strengthening, flexibility and balance exercises which will be beneficial for elderly people to avoid from falls and injuries. Our study was limited with 8 weeks. It is thought and believed that a similar but longer term study will be more effective.

In their research conducted on 112 elderly people, 63 of which were female and 49 were male and whose average of age was 70 ± 8 , for determining whether physical activity is related to life quality, Acree et al. (2006) determined that life quality was higher in the group who are more active in physical activity.

In a meta-analysis study examining the effect of sports on cognitive functions of elderly people, it was determined that physical exercise had a weak but significant effect on cognitive functions. It's thought that physical activity in advanced ages increases the level of arousal of individuals and provides them to be strong mentally (Canan and Ataoğlu, 2010). The study of Moonea et al. (2009) which has a nature that supports our study surmised that elderly people are not informed about the campaigns organized for them in a sufficient level and for this reason marketing mix elements of campaigns should be carefully regulated, put into order and expanded as a result of their social marketing study conducted over elderly people. Thackeray and Neiger (2002) observed that use of social marketing made people more ambitious and conscious and stated that social marketing is more effective than regular consciousness-raising efforts in their study which they conducted for the training of people to overcome and cope with diabetes.

It is considered that our study with the key promise of "Move and Be Happy" created awareness for individuals at the age of 65 and over accommodating in Mugla Province Abide-H. Nuri Öncüer Senior center in term of physical activity. It is thought and believed that a longer and comprehensive study will increase the rate of the success. Significant differences were found in values of physical functioning, body pain, general health, physical health, social functioning when physical, psychological and health conditions of elderly people voluntarily participated in the exercise program which had been limited with 8 weeks were compared as a result of the program. Although there are significant differences in these values, the fact that there is no statistically significant difference in the SF 36 total score should not be considered as negative. There is

regression in elderly people in terms of physical activity that stagnation may be considered as an improvement. Stagnation may be considered as positive and significant.

As a result, some significant differences were found in some variables when both physical and psychological health status of elderly men who participated in 8-week exercise program voluntarily and live in rehabilitation department of the senior center and participated in our study by being affected from social marketing program applied to elderly people were compared before and after the program. It is thought and believed that awareness for elderly men was created in terms of physical activity and quality of life within the framework of social marketing and elderly people provide a vital benefit from this condition and status. It is seen that regular exercises are useful and beneficial for health status, conditions and physical activities of elderly people and therefore affect quality of life of elderly people in the positive direction.

Research is limited because of the reasons that there is only one senior center in the city where the study was conducted and the capacity of this senior center is low. It was observed that elderly people, who do not want to participate in the program, were unwilling in participation and physical activity. Unwillingness reasons of them may be investigated and researched and some motivating studies may be done with experts.

It was founded that an awareness was created for elderly people to participate in physical activity with social marketing application, regular-made physical activities are beneficial and useful for elderly people and therefore affect their lives in the positive direction according to data of the study conducted in order to investigate and research affect of physical activity to quality of life of the male at the age of 65 and over as an

application in terms of social marketing approach. Significant differences were observed in values of physical function, body pain, overall health, social function and physical health when physical, psychological and health status of elderly people are compared before and after the exercise program that had been limited with 8 weeks. It must be

remembered that elderly people participating in this study participated voluntarily. If it is considered that the program was limited with 8 weeks and carried out with limited resources, studies with similar content but more long term, well-funded and comprehensive may provide more effective results.

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