

INVESTIGATING THE RELATIONSHIP BETWEEN CARDIOVASCULAR DISEASES AND PHYSICAL ACTIVITY AMONG THE ELDERLY IN YASUJ

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ABSTRACT

The purpose of this study was to investigate the relationship between cardiovascular diseases and physical activity among the elderly in Yasuj city. The purpose of this research is applied research. It is also subject to analytical research in terms of its nature and method, and it is temporally cross-sectional because it has been done within a certain time. The data were collected from library and field studies in this research. The statistical population of this study was among the elderly referring to the health centers during the period from June to June in Yasuj during the year 2017, of which 745 were the sample size of the study is 255 people by Morgan table. Sampling method was simple random. In this research, a questionnaire was used to analyze the data using Mann Whitney and Chi-Square tests using spss software. The results showed that 34.3% of the elderly had cardiovascular diseases and 48.8% had high blood pressure. Also, 17.1% had a history of at least one stroke. The results show that people who have smoked in middle age are significantly more likely to have cardiovascular disease in their elderly years. On the other hand, Chi-Square test showed a significant difference in the prevalence of cardiovascular disease among people with high blood pressure and those who did not have high blood pressure ($P < 0.001$). The findings also showed that there was a significant difference between the education level and cardiovascular disease ($P = 0.001$), so that the level of education was inversely related to cardiovascular disease. The results also showed that there was a significant relationship between the rate Walking, exercise, cycling, and midwifery in middle age with cardiovascular disease are significantly different in the elderly.

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INTRODUCTION

Cardiovascular diseases with 46% of all deaths are the first cause of death in Iran in 2001. The causes of these deaths are due to coronary artery disease and its complications, with 46% of the total, 24% related to stroke Cardiovascular diseases and 10% related to stroke are 12% related to other cardiovascular diseases. It has been shown that psychological factors play an important role in the development and development of cardiac disease (13). The results of Ebadi and colleagues showed a significant relationship between psychological variables and cardiac outcomes (4).

Cardiovascular disease is one of the most important diseases of the ages, including progressive disease, which began with childhood and manifests itself predominantly in adulthood from the middle ages. The rapid socioeconomic changes of recent decades in many countries of the Eastern Mediterranean and the Middle East, including Iran, have caused cardiovascular disease to be a major social and health problem that is rapidly increasing (1). The disease is the leading cause of death worldwide, which sends 17 million deaths every year (death from three deaths), and if there is no specific preventive action by 2020, this number will reach 24.8 million people (10).

The disease is caused by moderated risk factors at younger ages, so that the lack of physical activity increases the risk of cardiovascular events by at least 2 times. This is while impulsiveness is a global problem for the health of the community. Unemployed life is the leading cause of mortality, illness and disability, with about 2 million deaths each year due to lack of physical activity. In the United States, 25% of people do not have any physical activity outside the workplace, and 12% of all deaths in this country can be attributed to low activity (6).

Predicted, from 2020, nearly 25 million deaths from cardiovascular events are expected to occur in the first year, and the disease is among the first deadly and debilitating lesions [13]. In Iran, as in many countries, life is the cause of death and deaths (1) and is currently the first cause of mortality in people over 35 years old in Iran (12).

The findings from the World Health Organization's research suggest that lifeless life is one of the 10 major causes of death in the world. Information from the organization's research shows that between 60% and 85% of adults in different countries do not have enough mobility to improve their health. In fact, lifeless life increases all major causes of death and duplicates the risk of cardiovascular disease, diabetes and obesity (11).

According to a report from the Family and Population Health Office and the Department of Health of the Elderly of the Ministry of Health, the growth in the aging population of 0.9% is clearly higher than population growth of 1.2% (14). This is the most important disease in elderly age (5) and is also the most important cause of hospitalization of the elderly for cardiovascular disease (11). If no action is taken to improve cardiovascular health and the current trend continues, WHO says 25% of healthy years will be lost by 2020 due to cardiovascular disease (8).

Physical inactivity is known to be the fourth most common cause of mortality in the world. The most important risk factors in noncommunicable diseases include high blood pressure, high blood cholesterol, inadequate intake of fruits and vegetables, overweight and obesity, and lack of physical activity and tobacco use. Five factors of these risk factors are closely related to diet and physical activity. Overall, 6% of the causes of global mortality are related to diseases caused by physical inactivity (15), which is approximately 2/3 Millions of deaths per year in the world are associated with lack of mobility and lack of physical activity (16).

In Iran, according to statistics from some research on physical activity in the elderly, the increase in age is associated with a significant decrease in the level of physical activity. The physical activity of women in this age group is greater than that of men (13). However, the contradictions in this regard can be justified due to the difference in the culture of the population. But in general, in Iran, before the retirement age, according to the type of work of men, in comparison with housework, men have a higher level of physical activity, but after Retirement, and as the age increases, the level of physical activity of men decreases, while women continue to work in their home and daily tasks, and sometimes they take care of other family members, such as the care of grandchildren, and on the basis of the level of physical activity of women Added (9). Also, people with physical activity have fewer mortality than people with less activity or no activity at all because of diseases such as heart disease, blood pressure, stroke, diabetes and colon cancer, and chest There is less in them (14).

Regarding physical activity, studies show that in Tehran 80% of men and 85% of women do not have any physical activity outside the workplace or home even walking (2). Also, in the population of Qazvin, physical activity of people over 25 years old was studied and it was found that 43% of men and 57% of women did not have physical activity during the week. In Abhar, in urban areas over 25 years old, only 22% of men and 7% of women reported physical activity in urban communities (8).

Therefore, considering the increasing emphasis of health and wellness researchers on the association and correlation of physical activity with cardiovascular disease, the need to

identify the factors and coping strategies with it is felt more and more in patients (13). According to the available statistics, physical activity in our country is low and the rate of cardiovascular disease is high. The aim of this study was to determine cardiovascular diseases with physical activity among elderly people in Yasuj city.

RESEARCH METHODOLOGY

The purpose of this research is applied research. It is also subject to analytical research in terms of its nature and method, and it is temporally cross-sectional because it has been done within a certain time. To collect information in this research, library studies have been used in the study of subject literature and theories and the history of the subject matter from internal and external books as well as the collection of articles and journals in the organizations and library. The statistical population of this study was among the elderly referring to the centers the treatment was conducted in Yasouj during the three months (June to July 2017), with a total of 745 people; the sample size was 255 persons by the Morgan table. Sampling method was simple random. In this research, a questionnaire containing 31 questions including 6 questions about demographic characteristics, 5 questions related to cardiovascular disease (based on treatment with heart drugs or history of heart attacks or history of heart surgery), 20 questions related to the condition Physical activity (continuous or at least three times a week, sometimes or less than three times a week, never) by the type of sports such as walking, exercise, cycling, swimming, etc. during the middle ages (ages 30 to 60) Organized interviews were gathered. Mann-Whitney and Chi-Square tests were used to analyze the data using SPSS software.

FINDINGS

Describing the collected data in this study, it was found that 34.3% of the elderly had cardiovascular diseases and 48.8% had high blood pressure. Also, 17.1% had a history of at least one stroke. The results show that people who have smoked in middle age are significantly more likely to have cardiovascular disease in their elderly years. On the other hand, Chi-Square test showed a significant difference between patients with high blood pressure and those who did not have high blood pressure in cardiovascular disease ($P < 0.001$) (Table 1).

Table 1. Relative Frequency of Cardiovascular Disease Depending on Smoking and High Blood Pressure

Cardiovascular disease			Catching	Lack of Catching	The result of the Chi-Square test	
					P-Value	Chi-Square
Smoking cigarettes	Yes	Percent	42.1	57.9	0.03	4.08
	No	Percent	27.4	72.6		
High blood pressure	Yes	Percent	45.1	54.9	<0.001	26.21
	No	Percent	16.2	83.8		

The findings also showed that there was a significant difference between the education level and cardiovascular disease ($P = 0.001$), so that education had a negative relationship with cardiovascular disease (Table 2).

Table 2. Distribution of relative frequency of cardiovascular diseases by education

Cardiovascular disease Education		Catching	Lack of Catching	The result of the Chi-Square test	
				P-Value	Chi-Square
illiterate	Percent	50	50	0.001	6.89
Low literacy	Percent	51.9	48.1		
Secondary school	Percent	74.5	25.5		
Higher education	Percent	79.7	20.3		

The results indicate that there is a significant difference between the rate of walking, exercise, cycling and midwifery in middle age with cardiovascular disease in the elderly (Table).

Table 3. The percentage of cardiovascular disease in the elderly according to physical activity of walking, exercise, walking, cycling and table tennis in middle age

Cardiovascular disease Physical activity type		Percent Catching	PercentLack of Catching	The result of the Chi-Square test	
				P-Value	Chi-Square
walking	Ongoing	10.7	91.3	<0.001	44.28
	Sometimes	45.2	54.8		
	Never	68.5	31.5		
exercise	Ongoing	12.2	87.8	<0.001	35.20
	Sometimes	21.3	80.7		
	Never	49.2	50.8		
Mountain climbing	Ongoing	0.10	0.9	<0.001	25.12
	Sometimes	8.5	91.5		
	Never	40.2	59.8		
riding bike	Ongoing	0 12	100	<0.001	18.98
	Sometimes	38.5	88		
	Never		61.5		
Ping pong	Ongoing	0	100	0.02	5.81
	Sometimes	23	77		
	Never	32.9	67.1		

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DISCUSSION AND CONCLUSION

The findings showed that cardiovascular disease statistics of the elderly were high and the total of these findings showed that what should be considered in the elderly, the most important disease in this age, is cardiovascular disease. Therefore, attention to this disease requires extensive and serious efforts to reduce these statistics. The results indicate a significant difference between the amount of physical activity (walking, relaxation, birding, biking and table tennis) in middle age with cardiovascular disease in old age. So that continuous physical activity has been associated with high percentages of cardiovascular disease in middle age, and the picture, of course, is true. This means that the lack of physical activity of each of the cases raised during the middle ages in the daily program with a high percentage of cardiovascular disease in adulthood has been accompanied.

It seems to provide the facilities and actions necessary to encourage the staff of the agencies and organizations (at the same middle age and even the younger ages), broad-based community education about its benefits and sensitivities in the community, consideration of plans to carry out Regular physical activity in groups on holidays and other appropriate times and culture in order to promote physical activity in society, especially among women, can promote the health of the community and help reduce cardiovascular diseases in old age. Cardiovascular disease is one of the most prevalent diseases of the ages, including the onset of a childhood illness and its clinical manifestation, mainly in adulthood from the middle ages. On the other hand, lifeless life increases all major causes of mortality and doubles the risk of cardiovascular disease. WHO recommendation: Performing physical activity at least 30 minutes a day can be one of the most important factors in the prevention of cardiovascular disease. One of the most important factors for health is the regular physical activity that reduces the risk of non-communicable diseases, more intense physical activity that is done on a regular basis and under the supervision of a well-informed person. It can give you elderly people two ways to lose weight and reduce your blood sugar level - two risk factors for the heart.

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