Study of the Prevalence of Chronic Diseases (Cancer, Diabetes, Heart Disease) and Its Relationship with the Elderly's Quality Of Life

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Abstract

Introduction: Elderly is one of the most sensitive stages of life, and in the near future, a high percentage of the population is made up of the elderly. This period of life is often associated with an increased risk of chronic illness. The aim of this study was to determine the incidence of chronic diseases and its impact on the quality of life of the elderly.

Methods: In this cross-sectional study in 2018, 203 elderly subjects were selected through a multi-stage sampling method in elderly of Kahrizak sanatorium in Tehran. The history of chronic diseases was collected through checklist and face-to-face interviews. Quality of life assessment was performed using standard quality of life questionnaire (SF36). Data were analyzed using independent t-test and chi-square in SPSS software version 18.

Results: The results showed that 167 subjects aged 82.22% had at least one chronic disease and the quality of life of people with chronic diseases was significantly lower in all areas than in healthy subjects (P > 0/05).

Conclusion: The findings of this study indicate the high prevalence of chronic diseases in the elderly and its impact on the quality of life of the elderly. Therefore, it is necessary to focus on the elderly and take appropriate measures to improve the quality of life of this group of people.

1. Introduction

Long life is one of the achievements of the twenty-first century. The aging phenomenon of the world population is due to the reduction in the mortality rate due to advances in medical sciences, health and education, as a result of an increase in the rate of life expectancy (1). Elderly is one of the most critical stages of life and is a growing process that in the near future will account for a high percentage of the global population. The United Nations estimates that the world's elderly population will double by 20 billion in 2025 (1.2 billion) (2). According to the organization, Iran, after the UAE and Bahrain, ranked third in terms of population aging. Based on the statistics of the country's civil registration organization, the population growth rate over 60 years old in Iran from 2011-2050 is more than 26%, and it is expected that by the year 2050 about 33% of the population will be over 60 years old (3). As the age increases, the risk of one or more chronic illnesses increases, so that most of the elderly over the age of 60 have at least one chronic illness (4). Chronic illness is a long-term disease that causes physical changes in the body and limits the function of the patient. Chronic illness is usually difficult, and its treatment is long and difficult to recover, and in some cases there is no clear definitive treatment (5). At the moment, the number of deaths from chronic diseases and diseases of the aging period is

increasing rapidly. The cost and duration of the treatment are 20 to 30 times more severe than the disease, and the impact of these care on the elderly's lifespan and function is very low. (6). People with chronic illness often experience a disorderly illness that has a negative impact on the quality of life associated with health. On the other hand, the aging of the elderly with these diseases has a double effect on the decline in quality of life (7). Quality of life has a broad and multidimensional concept and has at least four aspects: daily activity of life, social function (work, home management), mental performance, and the ability to engage in enjoyable activities (recreation, entertainment, etc.) (8). What contemporary science takes into consideration is not just prolonging life, but it should be noted that the extra years of human life ultimately lead to calm and physical and mental health, and if such conditions are not met, scientific advances to supply Longer life will be fruitless. Evaluating the quality of life of the elderly will examine their health status, the effectiveness of medical and health interventions, disease assessment, cost estimation, and the effectiveness of health care policies in the elderly and help plan. (9) Forjaz Joao et al. Spain, the disability caused by chronic diseases is associated with poor quality of life. In this study, the prevalence of chronic diseases (59.5%) and high blood pressure (55.3%) are the most prevalent among the elderly (10). The results of Bazrafshan et al. Research show the effect of some factors such as diseases, level of education on marital status, age, income and occupation on the quality of life of the elderly (11). Considering the increasing number of elderly people and the serious risks of chronic illnesses and the fact that chronic illness can increase the burden of responsibility of the elderly family and financially cost, so doing studies to assess the health status of the physical and their psychology to raise the level of quality of life in this period is mandatory. Studies in Iran indicate that the studies conducted in this regard are mainly related to the effects of demographic characteristics such as age, sex, literacy and economic status on the quality of life of the elderly and the role of these variables in the study of chronic diseases not taken. Also, their impact on the dimensions and sub-dimensions of quality of life is not expressed separately. The aim of this study was to investigate the effects of chronic diseases and some demographic information on the quality of life of the elderly in Kahrizak sanatorium in Tehran. It is expected that the results of this study can provide appropriate and practical solutions to identifying effective factors in the quality of life of the elderly.

2. Method

This cross-sectional study was conducted. The minimum sample size of the study, taking into account the magnitude of the error of the type I at the level of 0.05, and the reported prevalence of chronic diseases in the elderly was 92.2% (9) and the estimated error was 0.1, the prevalence, using the formula for estimating the size of a ratio, 136 people were estimated. Finally, in order to increase the power of study, 203 elderly people over 60 years of age at Kahrizak sanatorium were enrolled using multi-stage sampling. In order to create the most variation in the sample, at first different sections of the sanatorium were identified and then from each section, with the inquiry of each section, the elderly over the age of 60 were selected. Before completing the questionnaire, the goals of the study were clearly explained to the participants in the study, and interviews were conducted only by those with oral consent to participate in the study. Data were collected through a two-part questionnaire and interviewed. The first part of the questionnaire included questions about the demographic characteristics of the subjects as well as questions about the history of chronic diseases. The purpose of this study is to identify any of the diseases of articular pains, hypertension, high blood lipids, low back pain, osteoporosis, cardiovascular disease, type 2 diabetes, depression, diseases and digestive disorders, chronic respiratory diseases, Myocardial infarction is cancer. The second part of the questionnaire was about the quality of life assessment of the elderly. For this purpose, the standard of quality of life questionnaire (SF36) was used. The questionnaire includes eight areas of physical function, limitation of the role played by physical problems, general health, physical pain, happiness and vitality, social function, role playing from emotional problems, mental health. The first four areas are related to physical and mental health. The following areas are related to the mental health dimension. Valuation of questions in each field by converting the total score of that area to the minimum score of zero and the maximum score of 100. In all areas, the score of zero points represents the lowest level of quality of life and the score of 100 represents the highest level of quality of life in the relevant area. In previous studies, the Persian version of the SF36 questionnaire has been standardized and its validity and reliability have been reported to be desirable (12). Data were collected by SPSS software version 18 and descriptive statistics were presented using mean and standard deviations for quantitative and frequency variables and percentages for qualitative variables. Statistical analysis of the data was also performed according to the nature of the independent variables using independent t-test and chi-square test.

3. Results

In the study, 203 elderly people living in the Kahrizak sanatorium participated in the study. The mean (SD) age of the elderly was 66.99 ± 8.28. Nearly a third of the elderly are illiterate, and only 10 percent of them have high school diplomas. The descriptive information of the variables studied in the study is presented in Table 1.

Table 1. Distribution of the variables studied in the elderly of Kahrizak sanatorium

Variable	Variable levels	Abundance	Percentage
Sex	Man	92	54.67
	Female	11	45.33
Age	60 to 74	128	63.05
	75 and above	75	36.94
education level	illiterate	76	37.43
	Literacy reading and writing	106	52.21
	Diploma and higher	21	10.34
Financial affiliation	Yes	115	56.65
	No	88	43.35

The results showed that 167 (82.26%) of the elderly were suffering from at least one chronic disease, and 36 (17.74%) had no chronic disease. The variables of sex, age, and level of education were significantly correlated with the incidence of chronic diseases (P> 0.05). The outbreak of chronic diseases has been reported in terms of the variables studied in Table 2.

Table 2. Frequency distribution of chronic disease in the elderly of Kahrizak sanatorium in terms of the variables studied

Variable	Variable levels	Chronic disease				Significance level (P> 0/05)
		Yes		No		
		Frequency	percentage	Frequency	percentage	
Sex	Man	70	76.08	22	23.92	0.036
	Female	97	87.38	14	12.62	
Age	60 to 74	98	76.56	30	23.44	0.005
	75 and above	69	92	6	8	
education level	illiterate	67	88.16	9	11.84	0.001
	Literacy reading and writing	106	16.04	17	83.96	
	Diploma and higher	11	52.38	10	47.62	
Financial affiliation	Yes	97	84.34	18	15.66	0.375
	No	88	79.54	18	20.56	

In terms of quality of life in the elderly studied, the highest and lowest mean of quality of life scores in the sub-scales of physical health were related to physical and physical health, respectively. Also under the mental health scale, the highest and lowest mean scores were related to the fields of vitality and vitality and social functioning. Based on the results of this study, the mean scores in all eight areas of quality of life in healthy elderly were higher than the elderly with chronic diseases, which was significant in all areas (P> 0.05).

In examining the relationship between gender and quality of life, it was determined that mean score of quality of life in physical activity and limitation of role played by physical problems were significantly higher in males (P> 0.05), and in other areas, there was a significant difference between There were no women and men. In the study of relationship between age and quality of life, it was found that the elderly belonging to the age group of 60 to 74 years in the field of physical activity had a higher mean score than the elderly of 75 years and this difference was statistically significant (P> 0.05), and In other areas, the difference between the two groups was not significant.

4. Discussion

According to the findings of the present study, a significant percentage of elderly people were referred to at least one of the chronic diseases. This is while higher than the incidence of chronic diseases in the United States (13). In a study by Habibi et al. On the prevalence of chronic diseases in the elderly in Tehran's west, 8.86% of the samples suffered from at least one chronic illness (14). Concerning the relationship between the incidence of chronic disease and gender, the findings show that there is a meaningful relationship between them. These results indicate that the incidence of chronic diseases in women is more than that of men, and this can be due to some of the complications of aging in women. One of the consequences of aging in women is menopause, which can lead to complications such as cardiovascular disease, osteoporosis, incontinence or lack of urine control. Until recently, researchers believed that physical changes that occurred during menopause in women was the main cause of the development of aging psycosis (15).Therefore, in this study, the high prevalence of chronic diseases in women than men may be due to menopause. In this study, the prevalence of chronic diseases in the elderly belonging to the age group of 75 years and above was more than that of

Haomiao group (60-74 years). He believes that age increases the incidence of chronic diseases (16). Also, the percentage of chronic disease in elderly people with higher level of education was significantly lower than those with low education. The British Institute of Cardiology and the British Journal of Brainwashing Safety in a statistical survey concluded that low-educated people suffered from premature aging, due to improper use of brain cells and DNA-related communications, faster than their peers. While those with university education are at an advanced age (17,18). Also, people who are in a better position are knowledgeable because of smoking, not exercising and not observing diets according to their elderly status, destroying their lives. In this study, there was no significant relationship between economic status and chronic diseases, which may be due to the financial support of the family and relatives of the elderly. There was a significant correlation between the incidence of chronic diseases and quality of life in such a way that people with chronic diseases had lower quality of life than healthy elderly and this finding was consistent with the findings of other studies (6, 7 and 9).

As stated above, quality of life has two dimensions: physical and mental, and each dimension has four domains. Here, we intend to discuss the role of demographic factors of the elderly with chronic diseases in the areas of quality of life.

Concerning the relationship between quality of life and the gender variable, the results indicate that there is a significant relationship between the physical function and the limitation of the role played by the physical problems between the sexes and the quality of life, and men have a better quality of life than women. With the advent of aging, malnutrition occurs due to the inability to ingest certain foods, such as protein foods, as well as to reduce the absorption capacity of the gastrointestinal tract. Lack of nutrition in the elderly reduces muscle mass and decreases bodily strength. (19,20). But this problem is more prevalent in women than men because the male body is more muscular than the female body, so that the muscles of an adult are 40% higher than that of a woman and the average physical strength of a man is 2 times the force of a woman His wife is his. This difference makes men more capable of physical and physical abilities than women (21). In the study of relationship between age and quality of life, it was found that the elderly belonging to the age group of 60 to 74 years had a higher mean score in physical activity than those aged 75 years and older. This difference was statistically significant. Malnutrition, Alzheimer's, muscle problems, osteoporosis, hypertension, fat and high blood sugar, fatigue, weakness, and reduced mobility, and hundreds of other diseases are the consequences of aging and aging (22), which can justify the findings. . This finding is consistent with the results of the study by Bowling et al. (23,24). The quality of life scores of elderly people who were financially dependent were significantly lower in all aspects of the eight dimensions of quality of life than those who had financial autonomy. Other studies have shown that quality of life and health are affected by incomes, and in poorer elderly people are more likely to develop illnesses, which reduces their quality of life (6).

5. Conclusion

Regarding the high prevalence of chronic diseases and the low quality of life of the elderly living in the Kahrizak sanatorium, the development and implementation of health and nursing programs is more useful. Conducting workshops to learn about the effects of aging and providing solutions to overcome these problems, providing advice and building counseling sessions and recreational facilities for the elderly can help to improve the physical and mental dimension of the quality of life of the elderly.

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