

The prevalence of hypertension among the elderly in patients in Al-Zahra Hospital, Isfahan, Iran

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Abstract

BACKGROUND: In this study, we discussed aging and common diseases associated with it which can lead to hospitalization. Hypertension was also evaluated as one of the factors affecting morbidity and mortality in elderly people.

METHODS: In this cross-sectional study, data was collected using checklists and extracting information from medical records in Al-Zahra Hospital (Isfahan, Iran). Data was then analyzed using descriptive statistics according to the research questions in SPSS.

RESULTS: A total number of 11,018 people aged 60-99 years were studied. Cardiovascular diseases were the most common cause of hospitalization [2063 patients (18.7%)]. In patients with cardiovascular diseases, 84 were suffering from hypertension, 76 had primary hypertension, 7 had hypertensive heart disease with or without congestive heart failure, and 1 had secondary hypertension. Among all hypertensive patients, there were 37 males (44.05%) and 47 females (55.95%). Moreover, 34 people aged 60-69, 30 aged 70-79, 18 aged 80-89 and 2 aged 90-99 years. Duration of hospitalization was less than 1 day for 12 people, 1-2 days for 27, 3-5 days for 25, 6-10 days for 14, 15-11 days for 6, and more than 15 days for 1 person.

CONCLUSION: Prevention and treatment of hypertension is important in order to control this disease. Untreated or poorly/untimely controlled hypertension would thus leave permanent side effects. It may thus leave sustained side effects if remain untreated or poorly/untimely controlled. However, people with hypertension were in minority in our study. Therefore, more research in this field with larger sample size is necessary for further identification of factors affecting quality of life in elderly people.

Keywords: Elderly, Hypertension, Cardiovascular Disease, Hospitalized.

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Introduction

In today's world, especially in developing countries, medical knowledge advancements along with improvements in economic, social, and welfare conditions have resulted in increased longevity and thus increased elderly population.

Health challenge in the twentieth century was only to survive and live longer. However, the challenge of the new century is "living with the best quality".¹ Quality of life in elderly people is affected by various factors including diseases and their complications. Therefore, with timely diagnosis and treatment of diseases, their quality of life can be improved. Hypertension is one of the diseases which is more common in old age and may affect the quality of life in elderly people. Kaplan considered a systolic blood

pressure above 140 mm Hg and a diastolic blood pressure above 90 mm Hg as hypertension.² According to the studies in the University of York, hypertension is a risk factor for stroke and ischemic heart disease in elderly people.³ The prevalence of hypertension in Eastern Mediterranean and Middle East countries has been reported to vary from 10% to over 17% in different studies.⁴ Iranian studies have shown the prevalence of high diastolic blood pressure among the age group of 35-65 years to be 47% in men and 55% in women. According to the results of "Health and Disease Project" which was conducted during 1990-93 in 24 provinces of Iran, approximately 34% of people aged 35-69 years in all provinces and 38% in the province of Tehran had diastolic hypertension.⁵

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Considering the growing number of the Iranian elderly population, it is necessary to identify their needs and plan strategies based on the cultural, social, and economic context of the country. One of the complications that may affect the quality of life among the elderly people is increasing the prevalence of hypertension for various reasons. In this study, we reviewed the prevalence of hypertension in individuals who were 60 years old and above.

Materials and Methods

In this cross-sectional study, data was collected by checklists using the available information in patient records in Al-Zahra Hospital (Isfahan, Iran) from March 2007 to March 2008. Data was then analyzed using descriptive statistics in SPSS.

Results

In this study, among 11,018 hospitalized patients aged between 60-99 years, 2063 patients (18.7%) were diagnosed with cardiovascular diseases. From the 2063 patients with cardiovascular disease, which was the most common disease among the study population, 84 people were suffering from blood pressure disorders, i.e. 76 patients had primary hypertension, 7 patients had hypertensive heart disease with or without CHF (congestive heart failure), and 1 had secondary hypertension (Figure 1). Figure 2 and 3 show the prevalence of different types of hypertension in males and females, respectively. From the total hypertensive patients, 37 were male (44.05%) and 47 were female (55.95%). In addition, 34 hypertensive individuals aged 60-69, 30 aged 70-79, 18 aged 80-89, and 2 aged 90-99 years old (Figure 4).

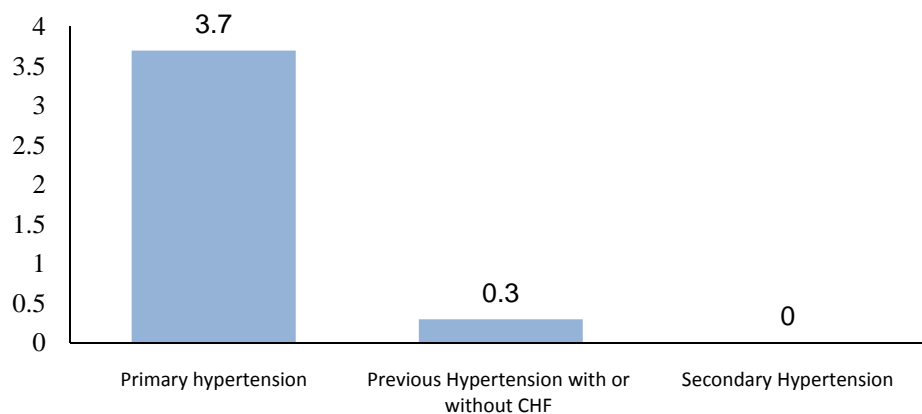


Figure 1. Prevalence of types of hypertension
CHF: Congestive heart failure

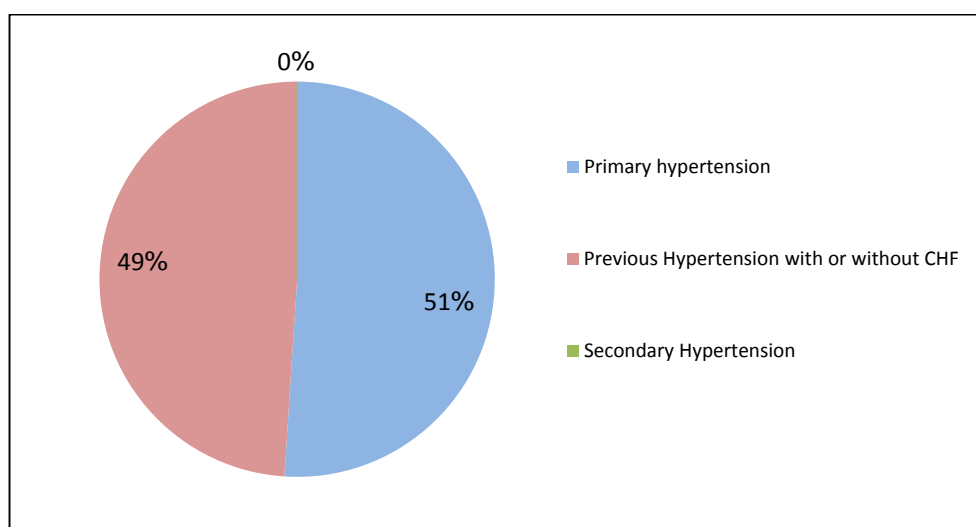


Figure 2. Prevalence of types of hypertension in males
CHF: Congestive heart failure

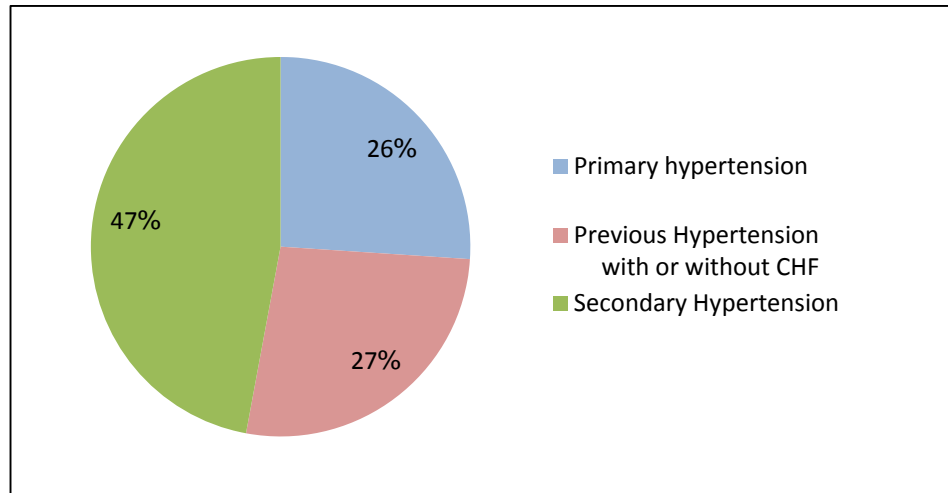


Figure 3. Prevalence of types of hypertension in females
CHF: Congestive heart failure

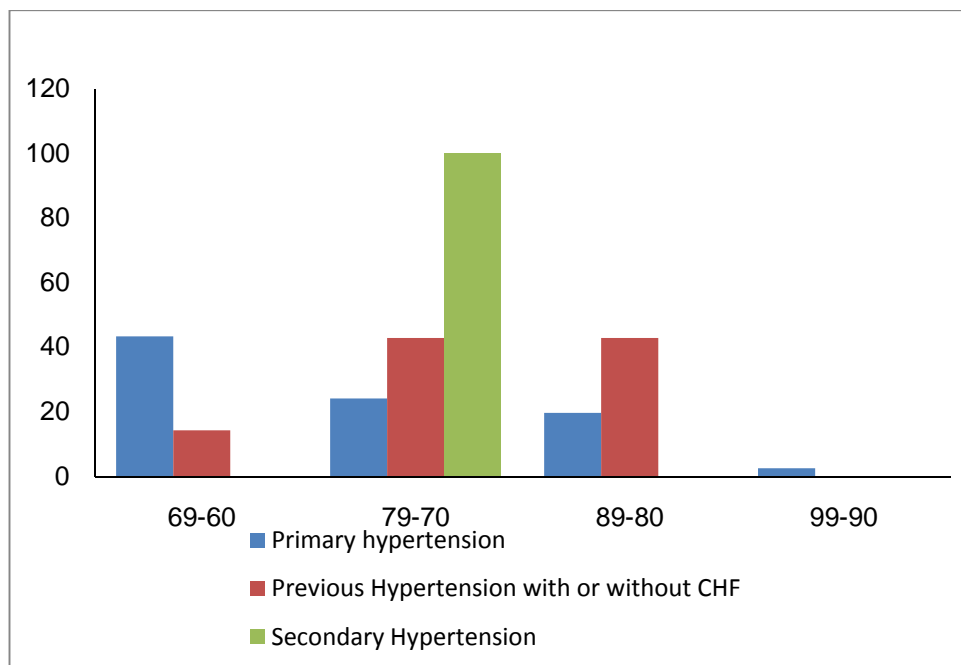


Figure 4. Age prevalence of types of hypertension
CHF: Congestive heart failure

Duration of hospitalization was less than a day for 12 persons, 1-2 days for 27 people, 3-5 days for 24 patients, 6-10 days for 14 people, 11-15 days for 6 individuals, and over 15 days for 1 person.

Discussion

In this study, we evaluated the prevalence of hypertension in hospitalized patients in Isfahan, Iran. A number of similar studies have been conducted in the country before. For instance, Peiman et al. studied the prevalence of common physical complaints in elderly people living in the city of Ilam. They found more than half of the elderly patients (52.4%) to be

suffering from chronic hypertension.⁶ Pishkar Mofrad et. al. studied chronic diseases among elderly people of Iranshahr and reported the rate of hypertension as 50.6%.⁷ In another study, Ehsani et al. reported the prevalence of hypertension as 26%⁸ while Hosseini et al. found a rate of 23.9%.⁹ Likewise, Mohammadi Zeidi and Heydarnia evaluated the risk factors for cardiovascular disease among elderly people in Chabahar and suggested the most common risk factor to be lack of physical activity (84.6%) and hypertension (50%).¹⁰ Sharifzadeh et al. found 80% of their studied elderly population to suffer from at least one disease among which the most common diseases

were hypertension, cardiovascular, and bone and joint diseases.¹¹

In addition, Kitler indicated high blood pressure as a cause for reduced quality of life whose proper management would improve quality of life.¹² Our findings in this study confirmed the negative effects of blood pressure including Our findings in this study confirmed the negative effects of blood pressure including prolonged hospitalization (85% of patients were hospitalized for 2-15 days). Hence, evaluation of hypertension in elderly people is essential and must be considered very seriously.

Conclusion

As hypertension was the most common problem among hospitalized elderly in this study, prevention and treatment are important in order to control this disease. Untreated or poorly/untimely controlled hypertension would thus leave permanent side effects.

One of the limiting factors in our study was the low number of hypertensive individuals compared to the whole studied population. Therefore, further studies with greater sample size are required to identify factors affecting quality of life in elderly people.

According to the negative effects of hypertension on the quality of life among the elderly, diagnostic and treatment centers for hypertension prevention and management need to be established, the prevalence of hypertension in different groups should be determined based on age, sex, location, and level of education, and finally the medical staff have to be educated about the importance, complications, and new therapeutic strategies to treat hypertension.

Conflict of Interests

Authors have no conflict of interests.

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