To Assess Risk Factors of Chronic Diseases in Geriatrics.

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ABSTRACT

Background: The present study was conducted to assess risk factors of chronic diseases in geriatrics. **Methods:** The present study was conducted on 86 patients aged >60 years of age of both genders. Patients were of diabetes, hypertension, arthritis, angina, chronic lung disease and stroke. In all subjects risk factors for chronic diseases were assessed. **Results:** Out of 86 patients, males were 52 and females were 34. Diabetes was present in 26, hypertension in 22, arthritis in 15, angina in 8, chronic lung disease in 11 and stroke in 4. The difference was significant (P< 0.05). The most common risk factor in diabetes patients was low socioeconomic status and primary education, in hypertension was primary education and low socioeconomic status, in arthritis was low SES, in angina was tobacco, in chronic lung disease was tobacco and in stroke was tobacco and alcohol. **Conclusion:** Common risk factors were low socioeconomic status, alcohol, tobacco and primary education.

Keywords: Alcohol, tobacco, primary education.

INTRODUCTION

The ageing population is a worldwide issue that will result in increased medical expenditure and workforce shortages in the elderly care sector in addition to other negative consequences.

A recent overview indicated that the proportion of people aged 60 years and over is expected to double between 2007 and 2050, reaching 2 billion worldwide by 2050.[1]

Chronic diseases are responsible for the majority of deaths worldwide. The baby-boomer generation makes up a large portion of the North American population, and there will likely be an increase in absolute numbers of heart attacks and strokes as this group reaches the age traditionally associated with the onset of cardiovascular disease, even if the rates of these events decline.[2] Cardiovascular disease is not the only concern: other chronic diseases such as cancer, pulmonary diseases, diabetes and osteoporosis are likely to increase in number. Risk factors such as smoking, high blood pressure, cholesterol, obesity, physical inactivity and diabetes are common to many of these chronic diseases. Primary prevention of even a few of these factors could result in an increase in disability-free years and ultimately, a reduction in

health care costs.[3]

The current situation of diabetes mellitus in India can be classed as an epidemic, as over 62 million people are diagnosed with the disease. India topped the chart in the year 2000 as the country with the highest prevalence of diabetes with 31.7 million cases at that time. If this trend is not controlled it is predicted that in the year 2030, diabetes may affect up to 79.4 million people in India.4 The present study was conducted to assess risk factors of chronic diseases in geriatrics.

MATERIALS AND METHODS

The present study was conducted in the department of Community Medicine. It comprised of 86 patients aged >60 years of age of both genders. The study protocol was approved from institutional ethical committee and all subjects were informed and written consent was obtained.

General data such as name, age, gender etc. was recorded. Patients were of diabetes, hypertension, arthritis, angina, chronic lung disease and stroke. In all subjects risk factors for chronic diseases were assessed. Results were tabulated and subjected to statistical analysis. P value less than 0.05 was considered significant.

RESULTS

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Table I Distribution of patients

Total- 86		
Gender	Males	Females
Number	52	34

[Table 1] shows that out of 86 patients, males were 52 and females were 34.

Table 2: Different chronic diseases in geriatrics

Chronic diseases	Number	P value
Diabetes	26	0.01
Hypertension	22	
Arthritis	15	
Angina	8	
Chronic lung disease	11	
Stroke	4	

[Table 2 & Figure 1] shows that diabetes was present in 26, hypertension in 22, arthritis in 15, angina in 8, chronic lung disease in 11 and stroke in 4. The difference was significant (P< 0.05).
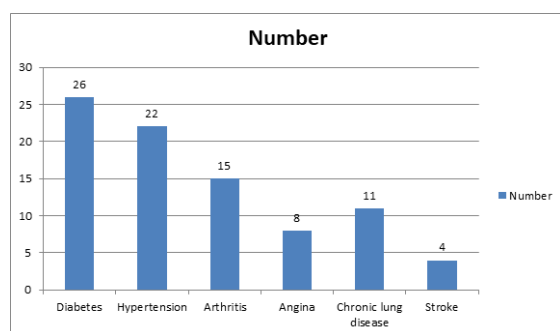
Figure 1: Different chronic diseases in geriatrics

Table 3: Risk factors in chronic diseases

Risk factors	Diabetes	Hypertension	Arthritis	Angina	CLD	Stroke
Low SES	12	16	8	5	3	2
Tobacco	4	7	2	6	4	3
Alcohol	6	8	4	3	3	3
Education primary	14	17	10	5	7	3
Secondary	12	5	5	3	4	1

[Table 3] shows that most common risk factor in diabetes patients was low socioeconomic status and primary education, in hypertension was primary education and low socioeconomic status, in arthritis was low SES, in angina was tobacco, in chronic lung disease was tobacco and in stroke was tobacco and alcohol.

DISCUSSION

India is a developing country currently going through an epidemiological transition, which includes economic growth, better health care, and better nutrition. As a result, there has been a reduction in infectious disease prevalence and an overall increase in life expectancy within the Indian population. However, there has been a corresponding rapid increase in chronic disease cases.[5]

Health service utilization was found to be dependent on the number of chronic disease risk factors only among individuals over the age of 50. People over the age of 50 with many risks factors (4+) went to the GP almost 30% more often than those with no risk factors; a similar result was found in annual specialist visits and hospital use. The effect of number of risk factors on specialist and hospital use was not seen until age 65. After age 75 the high-risk group was found to have 40% higher specialist use and 350% higher hospital visits than the group with no risk factors.[6] The present study was conducted to assess risk factors of chronic diseases in geriatrics.

In present study, out of 86 patients, males were 52 and females were 34. Diabetes was present in 26, hypertension in 22, arthritis in 15, angina in 8, chronic lung disease in 11 and stroke in 4. The most common risk factor in diabetes patients was low socioeconomic status and primary education, in hypertension was primary education and low socioeconomic status, in arthritis was low SES, in angina was tobacco, in chronic lung disease was tobacco and in stroke was tobacco and alcohol.

Safraj et al,[7] identified daily tobacco use, high alcohol consumption, low levels of exercise, and insufficient vegetable and fruit intake as common risk factors for chronic diseases. Adaji et al8 showed that significant independent risk factors for angina included area of residence, being diagnosed with diabetes, chronic lung disease (CLD) and arthritis. For arthritis, risk factors included having underlying diabetes, CLD diagnosis, or angina. Risk factors associated with CLD included arthritis, angina alcohol use, and tobacco use. Risk factors associated with diabetes included level of education, area of residence, socioeconomic status, angina, CLD, arthritis, stroke, and vegetable consumption. Finally, risk factors associated with stroke included diabetes and angina.

Kapoor et al,[9] found that overall, 31.7% (2961/9344) reported at least one of the four chronic diseases. The prevalence of hypertension, diabetes mellitus, COPD, and stroke was 26.0% (2449/9407), 8.0% (749/9371), 1.0% (95/9360), and 1.9% (175/9382), respectively. Common correlates of the four major chronic diseases were older age, being engaged in intellectual work, currently being a smoker and obesity. Gender, locality of residence, and alcohol consumptions were also found to be associated to some of the chronic conditions.

CONCLUSION

Authors found that common risk factors were low socioeconomic status, alcohol, tobacco and primary education.

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