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A Study on the Clinical and Health Problems of Urban Senior Citizens of Dharwad City, Karnataka State*

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Abstract :The study revealed that 92.10% of elderly subjects covered were anemic (<10 g% haemoglobin) and only 7.90% were normal (Haemoglobin more than 10g %). Nutritional deficiency symptoms were rarely seen among the elderly subjects studied. Problem of several diseases was more in females than males. In general, 30.90% of elderly subjects were on regular medication.

Introduction

Life is not mere living but living healthy applies more particularly to elderly persons. All over the world the people are living longer, thus increasing the number of elderly persons. World Health Organisation reports that with the improved health services the life expectancy of an average Indian rose from 44 years in 1960 to 52 years in 1981 (WHO, 1985).

About 54% of deaths in the developed countries are due to circulatory and certain degenerative diseases such as Diabetes Mellitus, peptic ulcers, nephritis, Chronic liver diseases, whereas in developing countries it is only 19%. Death due to infections and parasitic diseases is 40% in developing countries and only 8% in developed countries (WHO, 1987).

In the developed countries, all the problems of the elderly are well recognised and they are being treated and managed by qualified physicians in Geriatric Medicine. In India, so far no concerted efforts have been made to tackle the medical and health problems of the aged by a specialised group of doctors and hence, it has not been possible to give proper attention and care to the varied problems of the aged. With this view, the present study was conducted to understand the prevalence of health and nutritional deficiency among elderly sample of urban sector.

Material and Methods

The present study was undertaken in Dharwad City. Initially, the city was geographically divided into four parts. A total of 152 members aged 60 years and above (both males and females in equal numbers) were selected equally from each of the four parts by the stratified random sampling technique.

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A modified and pretested ICMR clinical schedule was used to assess the prevalence of nutritional deficiency diseases and the percentage prevalence was calculated. A structured questionnaire was designed to collect information regarding metabolic disorders and health status.

The blood haemoglobin level was measured by Cyanomethaemoglobin method (Varley, 1976). Haemoglobin values above 10g% were considered normal, 8 to 10 g% were considered moderately anaemic and below 8% were considered severely anaemic (Anonymous, 1974).

Results and Discussion

The highest percentage of elderly subjects (67.80%) belonged to the lower age group (60-70 years) and the least (13.80%) in the 70-74 years group. Majority (75%) of the subjects were strictly vegetarian, while others occassionally consumed egg and /or meat. It was interesting to note that 14.50% males and 11.80% females reported to have decreased their food consumption in old age intentionally. A higher percentage of females (17%) compared to males (13%) restricted sugar in the diet. Similarly, salt was restricted by 7.90% of females as against 5.60% of males. Rice and fats were restricted by 10% of males and 8% females and spices by an equal percentage (2.60%).

Nutritional deficiency symptoms were rarely seen among elderly subjects studied. About 2.60 and 11.80 percent of males and females showed moderate emaciation. Oedema was noticed in only one female while Bitot spot was observed in only one male subject. Garg and Singh (1983) also reported rare prevalence of nutrient deficiency signs among elders of meerut.

The blood haemoglobin picture depicted a high prevalence of anaemia in the sample. The mean haemoglobin level was found to be 8.10 g% with a range from 7.90 to 8.3 g per 100 ml (Table 1). Irrespective of the age group, the mean haemoglobin was below normal according to Indian Council of Medical Research standards (Anonymous, 1974). However, the mean haemoglobin level in males (8.60 g%) was significantly higher than that in females (7.70 g%).

A large number of elderly subjects (46.50) were severely anaemic with haemoglobin less than 8 g% and 45.50% had haemoglobin level between 8-10 g%. Very few subjects (7.90%) had more than 10 g% haemoglobin which was considered the normal value for this age group (Anonymous; 1974). The present observations are in tune with the study of Purohit and Sharma (1976) who reported 65.20% of elderly as anaemic. The study by Garg and Singh (1983) has revealed 41.60% elderly to be anaemic.

Inspite of wide-spread anaemic conditions observed among the sample, it was interesting to note that iron in take was adequate among 92.10% subjects in the present study. It is documented that ageing reduced the capacity to regulate iron metabolic processes (Munro, 1980).

Prevalence of disease was more in females than males Similar finding was also reported by Martinez (1989). In the present study eye sight problem was considered as major problem by 36.20% of subjects. Equal number of subjects (31) reported dental problem and pain in joints (Table 2).

The metabolic disorders viz., hyper tension and Diabetes Mellitus were reported by 18.40% and 14.50%, respectively. Garg *et al.* (1982) in their study have reported that 16.50 and 4.20% of respondents suffer from hyper tension and Diabetes, respectively.

Table 1 : Haemoglobin status of elderly by age and sex

Age (Years)	Sex	Total	Classification of Anaemia							
			Severe		Moderate		Normal		Mean Hb	't'
			N	%	N	%	N	%	(%)	value
60-64	Male	15	5	33.3	8	53.3	2	13.3	8.7	2.61*
	Female	27	18	66.6	7	25.9	2	7.4	7.6	
	Combined	42	23	54.7	15	35.7	4	9.7	7.9	
65-69	Male	16	3	18.7	10	62.5	3	18.7	8.8	
	Female	13	8	61.5	4	30.7	1	7.6	7.8	2.10*
	Combined	29	11	37.9	14	48.2	4	13.7	8.3	
70-74	Male	9	1	11.1	8	88.8	-	-	8.8	
	Female	6	5	83.3	1	16.6	-	-	7.2	5.18**
	Combined	15	6	40.0	9	60.0	-	-	8.2	
75 and above	Male	7	4	57.1	3	42.8	-	-	7.9	
	Female	8	3	37.5	5	62.5	-	-	8.4	1.50
	Combined	15	7	46.6	8	53.3	-	-	8.1	
Total	Male	47	13	27.6	29	61.7	5	10.6	8.6	
	Female	54	34	62.9	17	31.5	3	5.6	7.7	3.75**
	Combined	101	47	46.50	46	45.5	8	7.8	8.1	

* Significant at 5% level
** Significant at 1% level

About 29.60% of elderly subjects used spectacles and 20.40% had dental problems. General weakness was reported by 6.60% of subjects. These health problems found in elderly may be due to physiological changes due to ageing and reduction in active cell mass (Munro, 1980).

General weakness, pain in joints, rheumatism and mental worries were some of the problems faced by higher per cent of females than males.

In general 30.90% of elderly subjects used medicine regularly, About 18.40 and 10.50% of females and males used medicines for controlling hyper tension while 11.80 and 7.90% females and males used medicines to control Diabetes Mellitus. All subjects suffering from Asthma used medicines for relief (2.60%).

About 39.50% of elderly subjects supplemented their diet with tonics. About 9.30 of 7.90% females and males supplemented their diet with B complex vitamins. Iron supplement was used by only one female subject. Yurkiw and Krondl (1979) also reported that 42% of subject used nutrient supplements.

Table 2 : Health problems of elderly subjects by sex

Disorders prevalent	Combined		Male		Female	
	N	%	N	%	N	%
Eye sight problem	55	36.2	26	34.2	29	38.2
Dental problem	31	20.4	14	18.4	17	22.3
Joints pain	31	20.4	6	7.9	25	32.8
Hypertension	28	18.4	12	12.8	16	21.1
Diabetes	22	14.5	9	11.8	13	17.1
General weakness	10	6.6	3	3.9	7	9.2
Abdominal pain	5	3.3	-	-	5	6.6
Mental worries	4	2.6	1	1.3	3	3.9
Asthma	4	2.6	2	2.6	2	2.6
Rheumatism	2	1.3	-	-	2	2.6
Hearing problems	1	0.70	1	1.3	-	-

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