SOCIO-DEMOGRAPHIC CHARACTERISTICS AND HEALTH STATUS OF URBAN THAI ELDERLY

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Abstract. Socio-demographic and health status of 205 elderly aged 60-90 years who attended a special clinic for the elderly at Rajvithi Hospital were investigated. All of the subjects had no major complaints and seemed to be apparently healthy. Socio-economic situation, life-style pattern and other health related information was assessed. Nearly all of the elderly lived with their relatives. Quite a high number of the females had never attended school. Almost 60% of the elderly had no regular income. The health situation of the individuals under investigation seemed to be satisfactory. The majority did not smoke and did not drink alcohol. There are indications that in the future more of the elderly population will stay alone and will face economical problems because of the absence of general social security scheme for Thailand.

INTRODUCTION

In Thailand, the number of the elderly over 60 years of age increased from 3.2% in 1970 to 3.4% in 1988 and 4.5% in 1990. Additionally, life expectancy of Thai people has improved gradually. In 1965 it was only 53 years for men and 58 years for women. Today Thai men reach an average of 66.4 years and Thai women 71.8 years (Statistical Year Book, 1992). The elderly group has been widely considered as a group at particular risk of nutritional problems because of the reduced energy needs and decreased absorptive capacities, high incidence of chronic disease and frequent use of medications, and their vulnerability to physical and mental disabilities and poverty (Vatanavicharn *et al*, 1986). Inadequate protein or amino acid intake eventually causes impaired cellular functions, leading to increased morbidity and mortality (Young and Pellet, 1987). Studies on energy and nutrient utilization including protein metabolism in elderly have been well assessed in Europe by the EURONUT SENECA (Moreiras-Varela *et al*, 1991).

However information about the elderly in Asian countries especially in Thailand is still lacking.

Due to the rapid growth and spreading industrialization and westernization, accompanied by a trend towards smaller family units, the family cannot always provide sufficient care for the elderly. Therefore, the socio-demographic characteristics and life-style of urban Thai elderly were investigated as part of an elderly research project which concentrated on assessment of nutritional status and dietary intake being published elsewhere (Pongpaew *et al*, 1991).

MATERIALS AND METHODS

This study about the elderly people in Bangkok was planned and carried out by the Department of Tropical Nutrition and Food Science of the Faculty of Tropical Medicine, the Mahidol University. The socio-economic and family characteristics were assessed and analysed by means of questionnaires.

Subjects

Volunteers for the investigation were 205 elderly (59 males and 146 females) aged 60-90 years (mean

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age = 67) who attended a special clinic for the elderly at Rajavithi Hospital. From the general check up, which included x-ray diagnostics, electrocardiogram, blood pressure, temperature and blood examination, all were found apparently healthy. Only minor ailments and typical diseases of the elderly, such as mild hypertension, mild to moderate cardiovas cular disease, and non-insulin dependent diabetes mellitus were noted.

Questionnaires

Socio-economic data and health-related factors were assessed. Information on sex, age, level of education, marital status, occupations before and after the age of 60, living situation and economic status, were obtained by means of questionnaire. Furthermore, data regarding current health status and life-style were also obtained through questions concerning smoking and drinking habits, current medication, history of illness and medical complaints.

Statistical analysis

Socio-economic data were coded and outered in a Data Base Program. The statistical analyses were performed by means of the MINITAB program (Minitab, 1989) which generated descriptive statistics and carried out the relevant statistical tests.

RESULTS

Socio-economic data

Gender and Age: There were more female than male subjects. The age distribution shows that 87 subjects (42%) were between 60 and 65 years old and was nearly identical for males and females (Fig 1). For both sexes, most subjects were found to be in the first of four age groups. Although the mean age of the male subjects was higher, there was no statistically significant difference.

Marital status: Fig 2 depicts the marital status of the subjects. Most males were married (79%), whereas most females (56%) were widowed. Only a few or less than 5% for both sexes were single, divorced or separated. Single women outnumbered single men.

Living situation: As is shown in Fig 3, nearly all of the elderly (95% of the male and 92% of the female
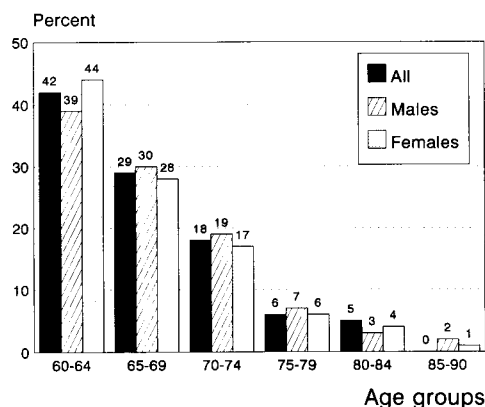

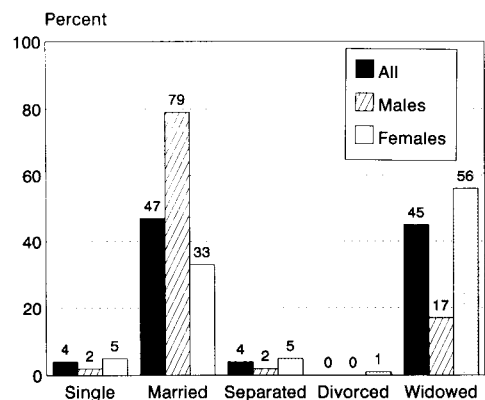Fig 1– Distribution of age of the 205 urban Thai elderly.

Fig 2– Marital status of the 205 urban Thai elderly.

subjects) lived with their relatives and usually with their children.

Educational background: Twenty-nine percent of the subjects never attended school, 47% attended primary school, and 20% finished secondary school. A degree or certificate had been obtained by only 3% (Fig 4). When considering the differences between the sexes, men were generally higher educated than women (Fig 5) as represented by the illiteracy rate [males (14%) and females (35%)] and by the proportion of those who had attended secondary school [males (44%) and females (10%)]. Whereas more females (50%) than males (39%) had completed only primary education, the proportion of females who graduated from university (5%), was higher than that of males (3%).
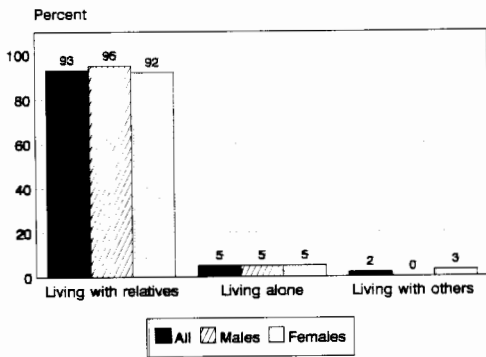
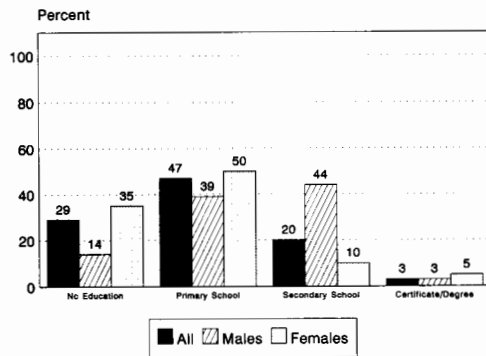Fig 3– Living situation of the 205 urban Thai elderly.

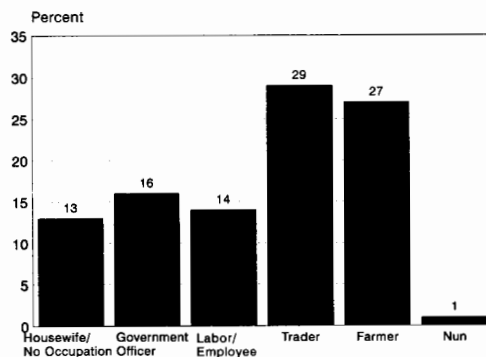Fig 4– Educational background of the 205 urban Thai elderly.

Fig 5– Occupation of the 205 urban Thai elderly before the age of 60 years.

Occupation before the age of 60: Before the retirement age of 60 years, 29% of the subjects had worked as traders, 27% had earned their living as farmers, 16%
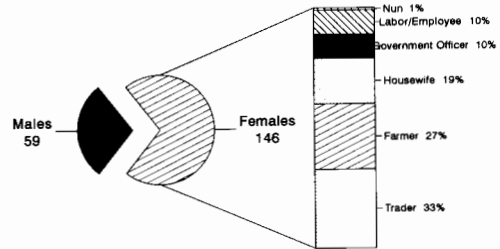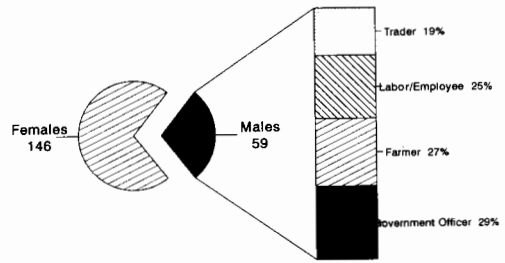

Fig 6– Occupation of the urban Thai elderly males and females before the age of 60.
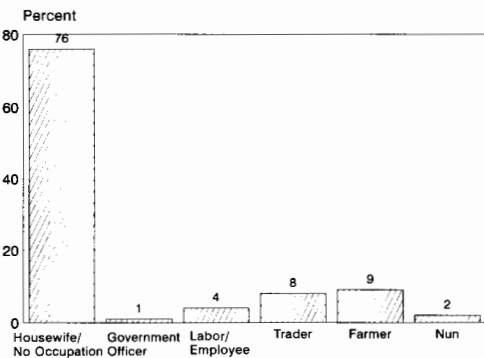

Fig 7– Current occupation of the 205 urban Thai elderly.

had been employed by the government, 14% were loborers or employees, and 13% had stayed at home, usually as housewives (Fig 5).

Fig 6 differentiates males' and females' occupations. There were more government officers and laborers or employees among males than among females. One third of the women had worked as traders and 19% as housewives. The proportions of farmers were similar for both sexes (27%).
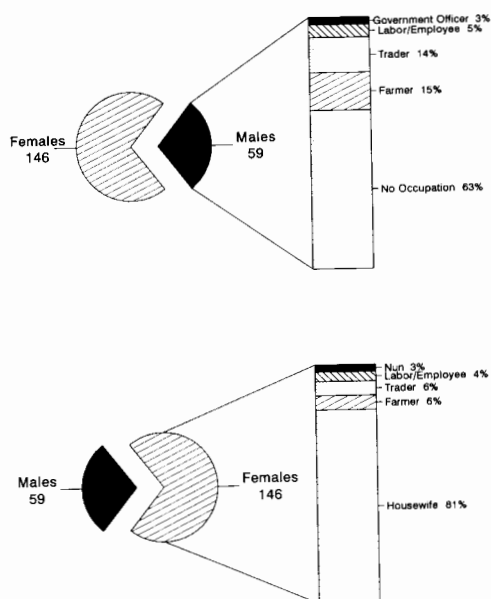
Fig 8– Current occupation of males and females urban Thai elderly.

Current occupation: At the time of investigation, 76% of the subjects stayed at home while 22% still worked as farmers (9%), traders (8%), laborers or employees (4%) and government officers (1%) (Fig 7). Among the females, 3% were nuns who lived in the temple (Fig 8).

Income situation: Sixty-three percent of the men and 32% of the women received regular incomes. Two thirds of the women reported having no regular

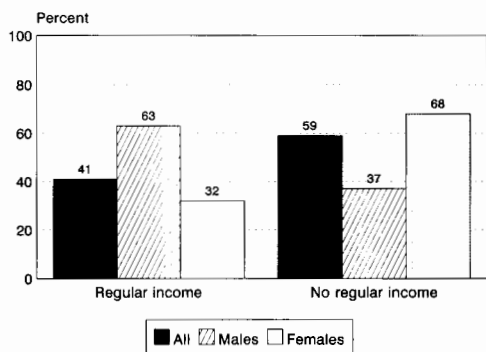

Fig 9– Income situation of the 205 urban Thai elderly.
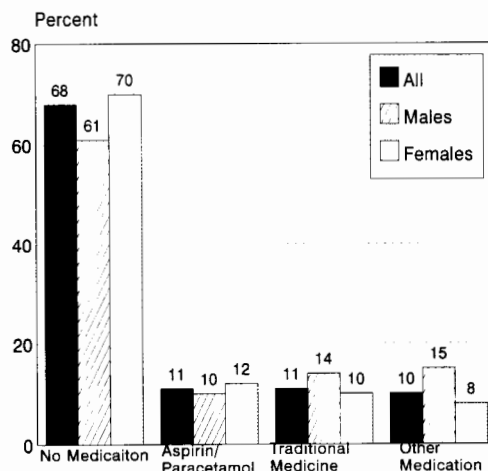

Fig 10– Medication situation of the 205 urban Thai elderly.
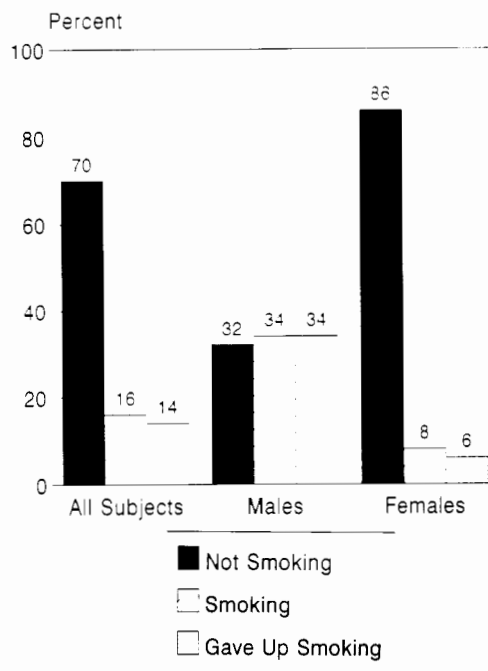

Fig 11– Smoking habits of the 205 urban Thai elderly.

income (Fig 9). Most of those without a regular income were supported by their children.

Health related data

Medication: Sixty-eight percent of the elderly investigated did not take any medicine at the time of
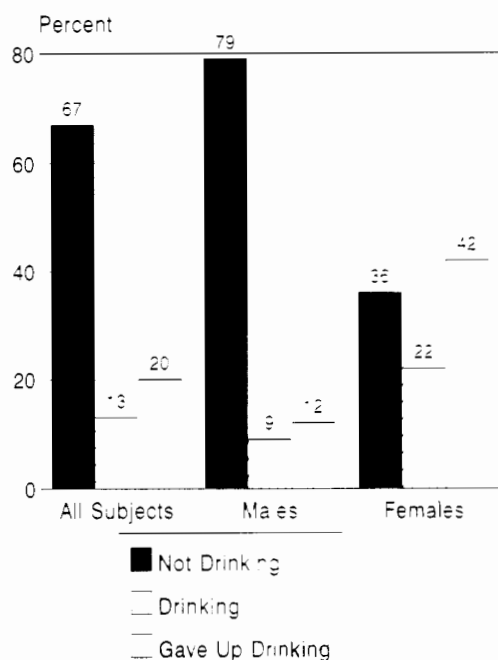
Fig 12– Drinking habits of the 205 urban Thai elderly.

the interview. Eleven percent took paracetamol or aspirin, 11% used traditional medicine and 10% took other medicaments (Table 1). A higher percentage of men than women consumed drugs (Fig 10).

Medical history: Forty-four percent of the male elderly did not report any illness, at the same time this was the case in nearly half of all female subjects. The most frequent diseases among the 59 males were peptic ulcer (12%), cardiovascular disease (9%) and pulmonary disease (7%). Cardiovascular disease, mostly hypertension, was the leading disease among women (14%) while peptic ulcer held the second position (10%). Other conditions mentioned by the women were gynecological diseases (8%), pulmonary and respiratory diseases (4%), asthma (3%), eye diseases (4%) and malignancies (5%) (Table 2). Diseases affecting the iron status through blood loss such as peptic ulcer, hemorrhoids, and hernia were reported by both males (17%) and females (11.7%) (Table 2).

Complaints of specific health problems: Fifty-seven percent of the subjects did not complain about any specific health problems. Among the rest, muscle and joint pain, headache, dizziness, getting tired easily and breathlessness (respiratory problems), abdominal pain and gaseous stomach were common infirmities.

Smoking habits: Smoking was popular among the elderly males. Two thirds smoked or had smoked in the past compared to 14% of the women (Fig 11).

Drinking habits: Seventy-nine percent of the women never drank alcohol and 36% of the men gave the same information. Forty-two percent of the males had given up drinking alcohol in the past and 22% of them still drank alcohol (Fig 12).

DISCUSSION

Seventy-nine percent of the male subjects were married whereas only 33% of the females were married. The majority of the females were widowed. This result parallels the study of the EURONUT group which reported that 60% to 90% of male elderly were married or lived with a partner (Schlettwein-Gsell et al, 1991). Another report from Thailand showed that the percentage of married male elderly was higher than females (87.7% in males and 53.1% in females) (Hematora et al, 1991). Single women were more frequent than single men. It has been reported that the lowest percentage of widowed women was found in a German speaking town in Switzerland and might reflect the high life expectancy in that country (Hematora et al, 1991). It has also been suggested that marital roles are strongly connected with cooking skills which may be more important in influencing dietary intake by elderly people than companionship during mealtimes. In an Australian survey, elderly men living with a spouse generally had more favorable dietary patterns than those living alone. Women living alone, on the other hand, had largely similar patterns and nutrient intakes equal to or greater than those of women living with a spouse (Horwatt, 1989).

It is frequent for the elderly parent, who is no longer economically active, to be supported by the family. This is a special characteristic of the Thai family since a very high percentage of both male and female elderly live with their relatives. Migration and urbanization will have direct effects on support for the elderly. A study of Euronut SENECA revealed that more than 93% of the elderly people lived in private home and more than 50% lived with their partners or children (Schlettwein-Gsell et al, 1991). Based on the data on marital status, the number of women living alone was the same as in men.

Table 1

Current medication of the 205 urban Thai elderly.

	Males		Females		All subjects	
	no.	%	no.	%	no.	%
No medication	36	61.0	102	70.3	138	67.6
Traditional medicine	8	13.6	15	10.3	23	11.3
Aspirin or paracetamol	6	10.2	17	11.7	23	11.3
Other medication	9	15.3	11	7.6	20	9.8

Table 2

Previous illnesses of the 205 urban Thai elderly.

	Men (no. = 59)		Women (no. = 146)	
	no.	%	no.	%
No disease	26	44.1	72	49.3
Cardiovascular diseases	5	8.5	21	14.4
Peptic ulcer	7	11.9	15	10.3
Tuberculosis	5	8.5	2	1.4
Malaria	1	0.7	2	1.4
Gynecological diseases	–	–	11	7.7
Pulmonary/respiratory diseases	4	6.8	6	4.2
Asthma	2	3.4	4	2.7
Eye diseases	1	1.7	5	3.5
Hernia	2	3.4	–	–
Hemorrhoid	1	1.7	2	1.4
Cancer/malignancies	3	5.1	2	1.4
Others	2	3.3	4	2.7

Epidemiological data suggest that eating alone leads to eating less regularly scheduled meals (McIntosh *et al,* 1989), to using convenience foods more often and to reducing the amount and variety of foods eaten (Davies, 1990).

Although the Government is trying to eliminate illiteracy by supporting the compulsory education till the end of primary school, the coverage is still incomplete. The illiteracy rate is quite high in males (14%), and even higher in females (35%). There is general agreement that educational level influences dietary intake (McIntosh, 1989). Cognitive knowledge is an important determinant of food choice but education also influences attitudinal dimensions and susceptibility to food-faddism and health claims (Coe and Miller, 1984).

It is not surprisingly that the occupation of urban Thai elderly before the age of 60 years is only 27% for agriculture whereas 29% are traders and 16% in government service. A high percentage (76%) of Thai elderly are unemployed after the age of 60. These data might directly relate to the income situation as shown

in Fig 9 although some might be supported by the family. The income situation has been shown already to influence socio-economic status and also health.

Smoking was popular among the elderly males. The number of ex-smokers exceeded 34% of both sexes who never smoked. This could be due to the knowledge that six types of cancer are caused in part by smoking as accepted by the International Agency for Research on Cancer (IARC, 1986). The smoking habits might also relate to medical history in Table 2, however more information is required to show any relationship.

Forty-two percent of males had given up drinking alcohol in the past and 22% of them still drank alcohol (Fig 13). The data on drinking habits will have to be cross-checked and validated with quantitative consumption of alcoholic beverages calculated from the dietary surveys (Schlettwein-Gsell *et al*, 1991). There is general agreement that smoking and drinking represent risk factors which have to be evaluated together with other risk factors such as low physical activity, obesity, diabetes and nutritional indicators as blood lipid and vitamin values (Osler *et al*, 1991).

The general health situation of the elderly under investigation seem to be satisfactory. However, from the interviews and previous health history, cardiovascular disease are the most illness of this subjects (Table 2). This is consistency with prevalence rate of deaths of heart failure which was proposed by Ministry of Public Health (Public Health Statistics, 1992). It is expected that in the future more of the elderly population will stay alone and will face economic problems because of the lack of sufficient welfare programs or general social security schemes which benefit them.

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