

Characteristics of elderly club participants of Tebet Health Center, South Jakarta

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In Jakarta there currently exists an elderly healthcare program which is implemented at community health posts, known as elderly clubs. Recently, an elderly needs assessment was done on active participants of such elderly clubs in Tebet, South Jakarta. Two out of six elderly clubs were selected for the survey: namely, Cempaka (CEC, $n = 45$) and Anggrek (AEC, $n = 40$). The need assessment consisted of demography, health, food patterns, environment, disease, physical disability, psycho-social status and family support systems. Approximately 85% of the elderly club participants were female and 15% were male. There were no significant differences between the two elderly clubs, except that CEC had more non-Javanese participants; a higher level of education among participants; more smokers; more women who lived with their husbands; and more participants with hypertension, arthritis, osteoporosis, diabetes and tooth loss. Psycho-social status of CEC was more normal for total potential scores than was AEC. Family support for the elderly was provided by two adult children. This rapid appraisal of the elderly could be a useful tool for developing specific community elderly programs.

Key words: elderly, needs, assessment, Jakarta.

Introduction

In the last two decades there has been an increase in the elderly population of Indonesia. The proportion of those over the age of 65 years increased from 1.1% (1975) to 6.3% (1997) of total population. In the last 20 years, there has been an increase of 5.2% of the elderly in the country.¹ It is projected that the proportion of elderly will be nearly double the amount today by the year 2020 (Table 1).

This phenomenon of increased elderly population in Indonesia occurred because of: (i) improved health status due to advances in medical research and technology; (ii) an epidemiological transition from mostly infectious to degenerative diseases; (iii) improved nutritional status exemplified by more obese rather than undernourished elderly; (iv) the gradual increase of life expectancy from 45 years in the early 1950s to 65 years today; (v) a move to a more sedentary urban lifestyle as opposed to an active rural lifestyle; and (vi) improved income per capita from \$US50 in the mid-1960s to \$US1088 in 1997, before the monetary crisis in Indonesia.

At the grass-roots level there has been a 'revolution', whereby the elderly have organized themselves into elderly

clubs that focus on regular meetings, 'pot luck' and other social activities. The health centre has attempted to organize these elderly health clubs and provide them with comprehensive health care. In the last 10 years there have been pilot projects in Indonesia focused on the provision of community elderly health care. This community health service has been initiated at both community health posts and urban reference health centres.^{2,3}

Tebet Health Centre was among the health centres selected for this project in South Jakarta. There were six elderly clubs in the seven sub-districts of Tebet district. There are 19 298 elderly people in this district but only 6.6% of them actively participate in this community program.

The objective of this study was to identify characteristics of members participating in the elderly clubs. This rapid appraisal of the elderly could be a useful tool for developing community programs specifically tailored to fulfil the needs of the elderly in this district

Methods

This study was a cross-sectional observation using a standard questionnaire. The questionnaire was designed using several established questionnaire forms, pretested and designed to fulfil the needs of the elderly in this district.^{1,4-6} The ques-

Table 1. Growth of the elderly in Indonesia 1971–97

Year	> 65 years (million)	% of total	Total population (million)
1975	1.4	1.1	132
1985	5.3	3.2	165
1995	8.2	5.2	195
1997	8.7	6.3	201

Source: Indonesia Central Statistics Bureau.

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tionnaire consisted of 56 variables which addressed demography, health status, food patterns, environment, illness, physical disability, psycho-social status and family support. A scoring system was used to evaluate health status, activity, body mass index (BMI), blood pressure, food patterns and psycho-social status. A guided interview was conducted by a team of five interviewers. Before the interview team members were trained to do interviews, following an interview protocol. Two out of six elderly clubs were randomly sampled for this study. The elderly groups sampled for the survey were from the 45-member Cempaka club (CEC) and the 40-member Anggrek club (AEC).

Psycho-social potential was calculated as a total score to reflect disability function of the elderly in daily activities, non-cooperative reaction, the ability to communicate and psycho-social dysfunction.

Total cognitive function scores were calculated using scores for information and orientation, and mental capacity measurements. Total potential assessment was calculated using scores for functional disability, apathy, communication capacity and psycho-social disturbance.

Results

Demography of elderly club members

There were no differences in the proportion of gender among elderly club members, the majority being female: namely, 84% at CEC and 85% at AEC. There was no difference in the proportion of those members over 65 years of age: namely, 31% at CEC and 37% at AEC. The predominant ethnic group at the two elderly clubs was Javanese, with 36% of CEC and 75% of AEC members being of Javanese origin. All club members belonged to the Muslim religion. The highest level of education of elderly club members was high school for 36% of CEC members and primary school for 35% of AEC members (Table 2).

Marital status showed that 64% of CEC members and 55% of AEC members were married. Fifty-one per cent of CEC women lived with their husbands and 40% of AEC women lived with family members. Fifteen per cent of AEC members lived alone, while only 4% of CEC members lived

Table 2. Gender, age group and education of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Gender				
Male	7	16	6	15
Female	38	84	34	85
Age				
55–64 years	29	64	16	40
> 65 years	14	31	15	38
Education				
No school	10	22	5	13
Primary	11	24	14	35
Secondary	6	13	9	23
High	16	36	7	18
College	2	5	5	11
Ethnic group				
Javanese	16	36	30	75
Sundanese	14	31	3	8
Others	15	13	7	17

alone. A total of 25% of AEC members, compared with 15% of CEC members, were the head of their household. The male was the head of the household in 58% of CEC members' household and in 48% of AEC members' households (Table 3).

Food patterns of elderly club members

Seventy-six per cent of CEC members and 70% of AEC members ate three meals per day. Forty-two per cent of CEC members and 63% of AEC members consumed protein twice per week. Sixty-nine per cent of CEC members and 75% of AEC members reported sufficient appetite (Table 4).

Twenty-nine per cent of CEC members drank three to five cups of fluid per day, while 33% of AEC members drank three to five cups of fluid per day. Seventy-one per cent of CEC members drank more than five cups per day, while 65% of AEC members drank more than five cups per day. Ninety-six per cent of CEC members and 93% of AEC members ate meals unassisted. Overall, 100% of CEC members and 98% of AEC members had high food pattern scores (Table 5).

Ailments and disabilities of elderly club members

A total of 29% of CEC members and 18% of AEC members complained of coughing in the last month. Eighteen per cent

Table 3. Marital status, living companion and household head of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Marital status				
Married	29	64	22	55
Widow	16	36	18	45
Living companion				
Husband	23	51	15	38
Wife	5	11	3	7
Family	15	34	16	40
Alone	2	4	6	15
Household head				
Husband	26	58	19	48
Wife	4	9	2	5
Family	7	16	7	18
Others	1	2	2	5
Alone*	7	15	10	25

* Respondents were head of their own households.

Table 4. Meals, protein consumption and appetite of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Meals per day				
2x daily	11	24	12	30
3x daily	34	76	28	70
Protein per day				
1x daily	7	16	7	18
2x daily	19	42	25	63
3x daily	19	42	8	20
Appetite				
Low	2	4	2	5
Sufficient	31	69	30	75
Normal	12	27	8	20

of CEC members complained of diarrhea compared with 10% of AEC members. Thirteen per cent of CEC members complained of fever compared with 10% of AEC members. Eighteen per cent of CEC members complained of diabetes compared with 5% of AEC members. Thirty-one per cent of CEC members complained of hypertension compared with 8% of AEC members. Fifty-three per cent of CEC members complained of arthritis compared with 8% of AEC members. Eighteen per cent of CEC members complained of osteoporosis compared with 0% of AEC members. Seven per cent of CEC members complained of cataracts compared with 15% of AEC members. Four per cent of CEC members complained of urinating difficulties compared with 0% of AEC members (Table 6).

Thirteen per cent of CEC members had no teeth compared with 10% of AEC members. Forty per cent of CEC

Table 5. Fluid intake, eating capabilities and food pattern of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Fluid intake				
< 3 cups	0	0	1	2
3–5 cups	13	29	13	33
> 5 cups	32	71	26	65
Eating capabilities				
Assisted	0	0	2	5
Difficult, but unassisted	2	4	1	2
Unassisted	43	96	37	93
Food pattern score				
Low	0	0	1	2
High	45	100	39	98

Table 6. Ailments of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Ailment				
Cough	13	29	7	18
Diarrhea	8	18	4	10
Fever	6	13	4	10
Diabetes	8	18	2	5
Hypertension	14	31	3	8
Arthritis	24	53	3	8
Osteoporosis	8	18	0	0
Cataract	3	7	6	15
Urinary problems	2	4	0	0

Table 7. Physical disabilities of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Physical disability				
No teeth	6	13	4	10
Artificial teeth	18	40	6	15
Chewing problems	12	27	11	28
Vision impaired	39	87	33	83
Hearing impaired	3	7	7	18
Smoking habit	5	11	0	0

used false or artificial teeth compared with 15% of AEC members. Twenty-seven per cent of CEC members complained of chewing problems compared with 28% of AEC members. Eighty-seven per cent of CEC members used eye-glasses to read compared with 83% of AEC members. Seven per cent of CEC members stated adequate hearing provided people spoke loudly compared with 18% of AEC members. Eleven per cent of CEC members admitted to smoking compared with 0% of AEC members (Table 7).

Health status of elderly club members

A total of 100% of CEC members were categorized as C (independent) compared with 93% of AEC members. Sixty per cent of CEC members had normal BMI values based on gender compared with 53% of AEC members. Seventy-eight per cent of CEC members had normal blood pressure compared with 90% of AEC members (Table 8).

Table 8. Type of activity, body mass index and blood pressure of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Type of activity				
Activity A	0	0	1	2
Activity B	0	0	2	5
Activity C	45	100	37	93
Body mass index				
Over	18	40	15	37
Normal	27	60	21	53
Under	0	0	4	10
Blood pressure				
High	1	2	2	5
Normal	35	78	36	90
Low	9	20	2	5

Table 9. Psycho-social status of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Psycho-social cognitive				
Normal	37	83	26	65
Low	5	11	7	18
Moderate	3	6	7	17
Psycho-social potential				
Normal	14	31	10	25
Low	8	18	19	48
Moderate	13	29	6	15
Severe	10	22	5	12

Table 10. Family support of elderly club members in Tebet, South Jakarta

Variables	Cempaka club		Anggrek club	
	n	%	n	%
Family support				
One child	7	16	6	16
Two children	11	25	7	18
Three children	7	16	13	34
Four children	9	20	1	3
≥ 5 children	10	23	11	29

Psyco-social status and family support of elderly club members

Eighty-three per cent of CEC members were categorized as normal for their psycho-social cognitive response compared with 65% of AEC members. Thirty-one per cent of CEC members were categorized as normal for their psycho-social potential, while 48% of AEC members were categorized as having low psycho-social potential (Table 9). Twenty-eight per cent of CEC members lived with two children, while 33% of AEC members lived with three children (Table 10).

Discussion

Eighty-five per cent of elderly club members in our survey were female. Thirty-five per cent of elderly club members were more than 65 years of age and 53% were between 55–64 years of age. Twelve per cent of these elderly club members were aged 45–55 years. They were mostly of a middle to lower socio-economic status and many had recently retired from active service (e.g. civil service and the armed forces). In Indonesia the official retirement age is 55 years. Attendance at elderly clubs is an ideal way for retirees to adjust to life after retirement and to old age.

Seventy-five per cent of AEC members came from Java, while 66% of CEC members were either Javanese or Sundanese. Of the CEC members, 36% had high school education and 22% had no schooling. Of the AEC members, 36% had primary education, 13% had college education and 13% had no education. Thus, these two elderly clubs differed in both ethnicity and education (77% of CEC members vs. 87% of AEC members had formal education).

The overall food pattern for both elderly clubs was good at approximately 73%. Among CEC members those eating protein food sources two and three times per week was approximately the same (42%), while among AEC members the majority ate protein food sources two times per week (63%). These protein foods were milk, soya tofu and tempe, red meat and fish. On average, food appetite was sufficient in both elderly groups (72%). An average of 68% of elderly group members drank more than five cups of fluid per day. Ninety-five per cent of elderly group members stated that they ate food independently. Overall, 99% of elderly club members had good food pattern scores.

The results of elderly living environments and their relationship to food preparation and sanitation will be discussed in another paper. However, an interesting observation was that the majority of AEC members used kerosene oil for cooking (53%) compared to CEC members who used mostly gas for cooking (64%). Fifty-eight per cent of CEC members used refrigerators to store food, while 48% of AEC members stored food in the cupboard. These conditions showed differences in economic status between the two groups and could partly account for the high number of complaints of infectious diseases from AEC members during the survey.

Ailments of which AEC members complained were coughing (18%), cataracts (15%), diarrhea (10%), fever (10%), hypertension (8%), arthritis (8%), and diabetes (5%). Ailments of which CEC members complained were arthritis (53%), hypertension (31%), coughing (29%), osteoporosis (18%), diabetes (18%), diarrhea (18%), fever (13%), cataracts (7%) and urinary difficulties (4%). Thus, most AEC

members complained of infectious ailments, while most CEC members complained of degenerative ailments.

A comparison between the two elderly clubs offered several interesting observations. The CEC members were much younger (64% between 55–64 years) than the AEC members (40% between 55–64 years and 38% over 65 years). Eighty-four per cent of CEC members consumed a combination of protein three times per day, while 63% of AEC members consumed protein only two times per day. Eleven per cent of CEC members had smoking habits compared with 0% of AEC members. CEC members were more prone to degenerative ailments than were AEC members. This condition may have been due to several reasons, namely their higher consumption of proteins; their smoking habits; or their higher education levels which may have made it easier for them to afford highly nutritious food.

The main task for health promoters in future will be to change unhealthy food habits in the elderly. However, the elderly may argue that they have lived a long and fruitful life and should have the privilege to eat whatever they desire. The types of healthy food recommended for the elderly may often be bland and tasteless for them. If eating a specific type of food is their main concern, then they should be advised to eat a well-balanced diet in moderation. In fact, the majority of elderly may have food intakes below the average requirement for their age group.^{7,8}

The physical impairments of CEC members were that 13% had no teeth, 40% had false teeth, 27% had chewing difficulties, 87% used eye-glasses, 7% could hear speech provided it was loud, and 11% had smoking habits. For AEC members, 10% had no teeth, 15% had artificial teeth, 28% had chewing difficulties, 83% used eyeglasses, 18% could hear speech if it was loud, and 0% had smoking habits. Thus, CEC members included more smokers and the majority wore eye-glasses.

All (100%) CEC elderly club members were categorized as independently active (Category C), 60% had normal BMI according to gender, and 78% had normal blood pressure. While 93% of AEC elderly club members were categorized as independently active (Category C), 53% had normal BMI according to gender, and 90% had normal blood pressure. Thus, more AEC members had normal blood pressure; however, AEC members had slightly lower BMI compared with CEC members.

Eighty-two per cent of CEC members had normal cognitive response, 31% had normal psycho-social potential, 48% had low psycho-social potential, 29% had mid-to-lower potential, and 22% had severely lower potential. Sixty-five per cent of AEC members had normal cognitive response, 48% had low psycho-social potential, 25% had normal potential, 15% had mid-to-lower potential and 13% had severely lower potential. With regard to family support systems, 28% of CEC members lived with two children and 23% lived with more than five children. A total of 33% of AEC members lived with three children and 31% lived with more than five children.

Total cognitive function scores were based on an aggregate score of: (i) information and orientation; and (ii) mental capacity measurements.^{1,5} Total potential assessment was based on an aggregate score of: (i) functional disability; (ii)

apathy; (iii) communication capacity; and (iv) psycho-social disturbance.

Thus, compared with AEC members, CEC members consisted of more Javanese and Sundanese ethnic backgrounds and had higher education levels. Most of the women lived with their husbands and the dominant ailments were more degenerative than infectious (i.e. arthritis, hypertension, osteoporosis and diabetes). Physical disabilities included tooth loss, false teeth, mastication difficulty and the habit of smoking. Psycho-social status of cognitive and potential responses was normal. Family support systems consisted mostly of an elderly person living with two adult children.

We recommend that health centres have comprehensive information on the health profiles of each elderly group. This is ideal for purposes of health promotion because each elderly group may have different health problems and require different health promotional strategies. We further recommend a health promotion program for CEC members that focuses on healthy lifestyle behaviour and on preventing degenerative diseases. Health promotion for AEC members should stress the importance of personal and food sanitation in order to support a healthy environment for the elderly. We further recommend that a rapid assessment instrument such as adopted for this study be used by health centres for appraising the health status and needs of elderly people in the community.

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