

# PERCEPTION OF THE ELDERLY TOWARDS SERVICES PROVIDED AT THE SENIOR CITIZENS' HEALTH CARE CENTRE: A COMMUNITY-BASED SURVEY, 1987

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## SYNOPSIS

A study was done in May 1987 on the perception of the elderly living in an area within Toa Payoh towards services provided at the Home Nursing Foundation Senior Citizens' Health Care Centre (SCHCC) located one kilometer away from the survey area. 272 persons (133 men and 139 women), representing 80.0% of the persons aged 60 years and over, responded to the survey.

The percentages of elders keen to utilize the various SCHCC services were: 28.7 for day care, 25.7 for rehabilitation, 28.3 for health education, and 44.9 for health screening. Men were found to be more likely to express interest in each of the four services. Those aged 75 years and above were less interested in the SCHCC services compared to the younger age group. Only 57 persons or 21.0% of the respondents knew the existence of the nearby SCHCC at Lorong 2 Toa Payoh. Of these 57 persons, only 4 had utilized the services at the SCHCC. The main reasons cited for not visiting the SCHCC were "no necessity", "not interested" and, "no transport".

SING MED J. 1988; 29: 341-346

## INTRODUCTION

In recent years there has been great interest in promoting the health and well-being of the elderly in Singapore in parallel with the demographic trends towards an ageing population. The proportion of those aged 60 years and over have increased steadily: from 3.8% in 1957, to 5.7% in 1970, to 7.2% in 1980, and 8.0% in 1986.<sup>(1, 2)</sup> The number of persons aged 60 years and older is expected to increase from 205,500 in the year 1986 to 326,900 in the year 2000.<sup>(3)</sup> This means an increase of 59% in the number of persons 60 years and older over the 14 year period 1986 to 2000.

Rapid socio-economic changes have occurred in Singapore during the last three decades. Some of these changes will influence the provision of care for the elderly.

### (a) Declining birth and fertility rates.

Crude birth rate, defined as the number of live-births per thousand population per year, fell drastically in the last two decades: from 42.7 to 14.7 in the year 1957 and 1986 respectively.<sup>(4)</sup> The total fertility rate, which is the average births per childbearing woman, has declined almost fourfold between 1957 and 1980: 6.41 to 1.48.<sup>(5)</sup> The elderly of the future will have fewer children and grandchildren from whom they can look for support than the present generation.

### (b) Increasing proportion of women participating in the labour force.

The percent of women aged 15-64 years participating in the labour force has increased by more than one and a half times between 1970 and 1986: from 31.0 in 1970, to 36.7 in 1975, to 47.2 in 1980, and 48.8 in 1986.<sup>(6)</sup> This would mean that women will be less available as informal caregivers of their elderly relatives when the latter become frail or dependent.

### (c) Shift towards nucleus family.

Between 1970 to 1980, the proportion of one-family nucleus household has increased from 71.5% to 78.0%, whereas multi-family nuclei households has increased from 11.7% to 10.1%.<sup>(7, 8)</sup> Thus more young couples tended to live apart from their ageing parents.

In response to these demographic and socio-economic trends, the Singapore Government set up a high level committee to look into the problems of the elderly in 1982. In the ensuing report "Problems of the Elderly", chaired by the then Minister of Health, it was recommended that the Home Nursing Foundation be expanded to provide a more comprehensive community-based health services for the elderly.<sup>(9)</sup> Subsequently, two Senior Citizens' Health Care Centre (SCHCC) were opened in 1986. The centres provide a wide range of services which include rehabilitation, day care, health education, health screening, and Befriender's service. This paper reports on the findings of a survey on the perception of 272 persons 60 years and above living in the community towards services provided at the SCHCC.

## MATERIALS AND METHODS

The survey was carried out in a defined area with Toa Payoh, one of the older public housing estates in Singapore. The sampling frame consisted of all persons aged 60 years and over residing at the time of the survey in eleven blocks (three 1-room flat type, seven 3-room flat type, and one 5-room flat type) of Housing and Development Board (HDB) flats. The field work was done by twenty third year medical students as part of a larger community health survey in the month of May

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Respondents were interviewed in their homes using a standardized questionnaire. They were asked if they would be interested to utilize the services available at a health centre close to their home. Specifically, the services enquired were (a) rehabilitation (translated as exercises in the local dialects), (b) day care, (c) health education talks and demonstration, and (d) health screening. For those respondents who indicated interest in day care service, their preference for the frequency of attendance per week and how much they would be prepared to pay for the service were ascertained. Furthermore, the actual utilization by the respondents of the services provided at the SCHCC located at Block 151 Lorong 2 Toa Payoh were obtained. This SCHCC is approximately one kilometer away from the survey area and is easily accessible by feeder bus service. Steps were taken to minimise non-response: (a) a notification letter was sent in 3 languages prior to the survey proper, (b) interviewers carried their student matriculation card and letter of identity, (c) rapport was built up by taking the blood pressure of the respondents, and (d) all interviewers observed a proper dress code.

The data collected was carefully checked, properly coded and analysed using the SAS package in the IBM mainframe computer of the National University of Singapore.

## RESULTS

Altogether 272 persons responded, contributing to a response rate of 80.0%. Analysis comparing the respondents

and non-respondents showed that they were similar with respect to age group, sex, and flat type distributions. However, there was an under-representation of the Chinese compared to the non-Chinese in the sample.

There were 133 males and 139 females (Table 1) and four-fifths of them were Chinese. One-third of respondents were in the 60-64 years age group, whilst those aged 75 years and over constituted 16.9%. Most of them were either married (59.2%) or widowed (38.2%); the singles formed only 1.8%. More than two-thirds of the respondents did not complete primary school. Four-fifths of the respondents were staying in the 3-room flat type which is the most common flat-type in Toa Payoh and other older HDB housing estates in Singapore. Interestingly, we found that 4.8% of the elderly were staying alone.

### Interest in Utilizing Various Services

The proportion of respondents indicating interest in utilizing three of the services — rehabilitation, day care, and health education talk/demonstrations — were similar (Table 2). Approximately one-third of the men and one-quarter of the women indicated interest. The most popular service was health screening. 51.9% and 38.1% of the men and women respectively would like to go for health screening. In fact, 14.3% of the respondent indicated interest only in the health screening service. An interesting pattern was noted that if a respondent were interested in one service, it was very likely that he would be interested in all four services.

78 respondents expressed interest in utilizing the day care services. 58 respondents indicated their likely frequency

Table 1  
PROFILE OF THE 272 RESPONDENTS

CHARACTERISTICS	NUMBER	PERCENT
SEX		
Male	133	48.9
Female	139	51.1
AGE		
60-64 yrs	90	33.1
65-69 yrs	76	27.9
70-74 yrs	60	22.1
75 & above	46	16.9
ETHNIC GROUP		
Chinese	218	80.1
Malay	39	14.3
Indian	13	4.8
Others	2	0.7
MARITAL STATUS		
Single	5	1.8
Married	161	59.2
Widowed	104	38.2
Div/Sep	2	0.7
HIGHEST EDUCATIONAL LEVEL ATTAINED		
None	186	68.4
Primary	52	19.1
Secondary & Above	34	12.5
FLAT TYPE		
1-room	38	14.0
3-room	217	79.8
5-room	17	6.3
NO ON PERSONS LIVING IN HOUSEHOLD		
Alone	13	4.8
2-3	101	37.1
4 or more	158	58.1

Table 2  
**PERCENT OF RESPONDENTS INTERESTED TO UTILIZE VARIOUS SERVICES  
 PROVIDED AT HEALTH CENTRE**

SERVICES	MALE (n = 133)	FEMALE (n = 139)	M + F (n = 272)
Rehabilitation*	32.2	19.4	25.7
Day Care*	33.1	24.5	28.7
Health Education*	34.6	22.3	28.3
Health Screening*	51.9	38.1	44.9
At least one of the above services	56.4	41.7	48.9
All four services	24.1	25.8	19.9
Health Screening alone	15.8	12.9	14.3

\* The percentage included persons interested in the particular service alone or in combination with one or more of the other services.

of attendance for day care: 51.7% opted for once a week, 34.4% for 2 to 3 time a week, and 13.8% for 4 times or more a week. 59 respondents gave their opinion as to the amount they would be prepared to pay for day care service a day: 20.3% were not willing to pay, 55.9% said less than \$5, 20.3% said between \$5 to less than \$10, and 3.4% said between \$10 to \$15.

#### Factors Influencing Interest In Utilizing Services

Table 3 showed how various factors influenced the interest rate of utilizing rehabilitative service. The interest rate for men was one and a half time higher than that of females and this

was significantly different at the 0.05 level. For those aged 75 years and above the interest rate was only one-third compared to those below 70 years. As expected, those with problems with mobility showed higher interest. The same pattern was found for factors influencing the interest rate of participating in day care service and health education talks.

Table 4 showed how various factors influenced the interest rate of participating in health screening. The associations observed were: (a) male gender — two and a half time higher than females; (b) age — an inverse relationship was seen in which the rate declined from 54.4% for the 60-64 age group to 26.1% for those 75 years and above. Three other variables studied — flat type, number of persons living with

Table 3  
**RESPONDENTS WHO WOULD LIKE TO PARTICIPATE IN REHABILITATIVE SERVICES  
 AT THE HEALTH CENTRE BY VARIOUS CHARACTERISTICS**

CHARACTERISTICS		Elderly Participants		P value
		Number	%	
SEX	Male	43	32.2	0.022*
	Female	27	19.4	
AGE	60-64 years	26	28.9	0.093
	65-69 years	22	29.0	
	70-74 years	17	28.3	
	75 & above	5	10.9	
FLAT TYPE	1-room	6	15.8	0.297
	3-room	60	27.7	
	5-room	4	23.5	
NO. OF PERSONS LIVING IN HOUSEHOLD	Alone	3	23.1	0.198
	2-3	20	19.8	
	4 & above	47	29.8	
MOBILITY STATUS	Freely mobile	52	23.7	0.176
	Some Limitations	18	34.0	

\* The difference in interest is statistically significant as computed by the chi-square test.

Table 4  
**RESPONDENTS WHO WOULD LIKE TO HAVE HEALTH SCREENING AT HEALTH CENTRE  
 BY VARIOUS CHARACTERISTICS**

CHARACTERISTICS		Elderly Participants		P value
		Number	%	
SEX	Male	69	51.9	0.031*
	Female	27	19.4	
AGE	60-64 years	49	54.4	0.012*
	65-69 years	37	48.7	
	70-74 years	24	40.0	
	75 & above	12	26.1	
FLAT TYPE	1-room	14	36.8	0.514
	3-room	101	46.5	
	5-room	7	41.2	
NO OF PERSONS LIVING IN HOUSEHOLD	Alone	6	46.2	0.0899
	2-3	47	46.5	
	4 & above	69	43.7	
MOBILITY STATUS	Freely mobile	97	44.3	0.822
	Some Limitations	25	47.2	

\* The difference in interest is statistically significant as computed by the chi-square test.

the aged in the household, and mobility status — did not appear to have much influence.

#### Utilization Of Services At The Nearby SCHCC Last Year

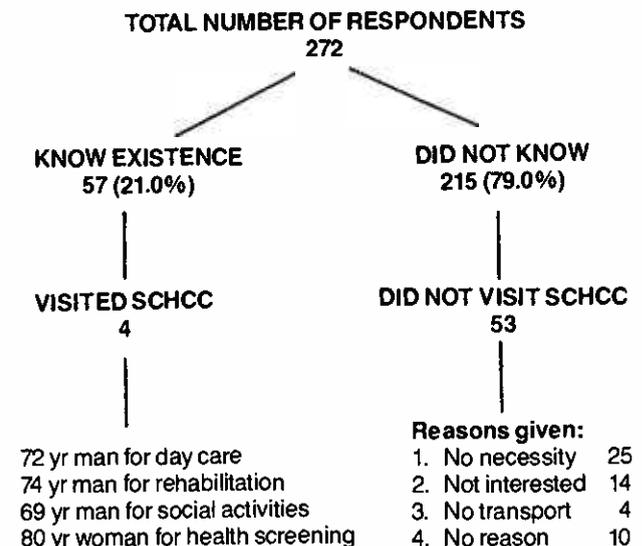
The nearby SCHCC started functioning in May 1986, a year before the survey. Chart 1 shows the percent of respondents who knew of the existence of this centre and what services they had utilized during the past year. Only a low 21% of the respondents knew of the existence of this centre, and only 4 had made use of the services there before. Interestingly, each of these four persons went to the centre for different services. Fifty-three persons knew of the existence of Kuo Chuan SCHCC but did not utilize the services there. The main reasons given by them were firstly "no necessity" 48.1%, followed by "not interested" 26.9%, and "no transport" 5.8%; 19.2% of them did not give any reason.

#### DISCUSSION

The majority of the elderly aged 60 years and above are staying in private household in the community with only about 2% living in institutions.<sup>(10)</sup> The emphasis all over the developed world is to promote the health and well-being of the elderly within the community instead of channelling the scarce resources for the provision of institutional care. This would entail the development of an integrated network of social and health services for the elderly in the community.

Community-based health maintenance services for the elderly are relatively new in Singapore. The first elderly day care centre, Bukit Merah Day Care Centre for the Elderly, started operation in November 1980 under the initiative of the Singapore Council of Social Services.<sup>(11)</sup> Since then four additional centres have started to provide elderly day care services: the Ling Kwang Home Day Care Centre in 1985 by a church group, the Ayer Rajah Day Care Centre in 1968 by a neighbourhood group, and the two Senior Citizens' Health Care Centres (SCHSS) at Kampong Ubi and Kuo Chuan in 1986 by the Home Nursing Foundation. It is the plan of the

Chart 1  
**KNOWLEDGE OF KUO CHUAN SCHSS AND REASONS FOR UTILIZING AND NOT UTILIZING THE SERVICES THERE**



Home Nursing Foundation with the support of the Ministry of Health to set up ten SCHCC eventually by 1992.<sup>(12)</sup> These centres, to be located strategically at densely populated new towns, aim to provide a comprehensive package of community-based services for the elderly. The objective is to help the elderly to keep themselves physically fit and mentally active so that their quality of life can be improved within the environment of their own families, friends and neighbours.

The Home Nursing Foundation (HNF) is a charitable organisation established in 1976 by the then Minister of Health. The HNF mobilises community resources for volunteers and donations to fund its projects. The operational costs of the SCHCC are financed by the HNF while the Ministry of Health provide support by way of the administrative staff for the planning of the services and also the 7 full-time staff attached to each SCHCCs are open Mondays to Fridays from 8.00 am to 5.30 pm. In the centres, the elders interact with each other, perform rehabilitative exercises, enjoy recreational activities, and learn how they can take care of themselves and their health. The family members are also taught how to take care of their elderly. Lunch is provided for those who come for a full day session. An individualised rehabilitative programme is worked out for participants who have significant disabilities so that maximum function can be restored to enable them to lead an independent life. The fees for utilizing the services at the SCHCC are nominal; it is a policy that nobody will be deprived of the services because of the inability to pay, as charges can be reduced or waived.<sup>(13)</sup>

In an earlier study,<sup>(14)</sup> Fong et al reported that amongst a group of 65 post-stroke patients staying in private households, 38.5% of them were keen to participate in a day care service if it were priced at \$10.00 a day. While planning to develop community-based services for the elderly, the perceived advantages as noted by the planners, may or may not be recognised and accepted by the elders, the users of these services. This study attempts to ascertain the degree of interest and acceptance by the elderly in the general community towards services at the SCHCC. Our findings suggest a very substantial interest in all the services: 25.7% for rehabilitation, 28.7% for day care, 28.3% for health education, and 44.9% for health screening. This is very encouraging in view of the fact that the actions required of the elders are new to many of them.

The males showed a consistently higher interest rate than the females in all four services, namely day care, rehabilitation, health education and health screening. This is probably due to the females' commitments in caring for the grandchildren and household chores while their children are at work. It is likely for many elderly females preventive health care holds a lower priority than their commitments to domestic responsibilities. On the other hand, the males after their retirement from full-time occupation, generally have more free time and are thus able to make use of the SCHCC services. It is noteworthy that respondents with impaired mobility were 1.4 times more interested in joining rehabilitative exercise than freely mobile respondents. It is worth reiterating that the SCHCC is not just a social centre but has its focus the maintenance of health and rehabilitation for the frail elderly and the semi-ambulant.

It has been recommended that persons 60 years and

over go for health screening every two years for the early detection of the major chronic diseases, including hypertension, heart diseases, diabetes, cancer, as well as vision and hearing impairments.<sup>(15)</sup> A systematic health screening programme in the SCHCC is provided on a voluntary basis by 10 general practitioners from the neighbourhood. Each physician conducts his monthly session for two hours between 12.30 to 2.30 pm. General screening consists of a head to foot general physical examination, urine analysis, blood glucose estimation, eye test, chest X-ray, and audiometric assessment of hearing. Those elderly with ear and eye problems are then referred to the specialist clinic at the centre where they are seen by ENT specialists and ophthalmologists respectively. It is encouraging that our respondents showed enthusiasm for health screening: 51.9% of men and 38.1% of women indicated interest.

The awareness of the nearby SCHCC was rather low — only 21% of respondents. Actual utilization of the services was even lower — 4 persons or 7% of those who knew of the Centre's existence. These perhaps illustrate the well-documented observation of the stages in diffusion and adoption of innovations.<sup>(16)</sup> The theory of adoption of innovations conceives of individuals passing through stages labelled as "awareness", "interest", "trial", "decision", and "adoption". The curve for adoption is S-shaped with a small percent of innovators adopting in the early stages whilst the majority will be late adopters. This would mean that there is usually a considerable time interval before innovations such as services at SCHCC become widely accepted. There is clearly a need for a well-planned health education programme to encourage the elderly to be more health conscious and to avail themselves of the services at the SCHCC. The promotional effort should be two-pronged: directed at all elderly people who are potential users as well as the professionals rendering care for the elderly. The professionals have a strategic role in reinforcing the messages and also in referring the elderly who would benefit from the services.

#### ACKNOWLEDGEMENT

We thank Professor Lee Hin Peng, Head of the Department of Community, Occupational and Family Medicine for permission to publish these findings. We are also grateful to Dr Chen Ai Ju, Deputy Director of Medical Services Primary Health, for her comments and support. The following medical students took part in the survey: Richard Sim, Susan Varghese, Mabel Cheng, Justina Dairianathan, Terry Toh, Iqbal Singh, Teo Song Kim, Goh Boon Cher, Angela Leong, Nelson Chee, John Hui, Khairul b. Abdul Rahman, Edmund Ng, Colin Quek, Inez Perera, Kenny Sin, Kulgit Singh, Tavintharan Subramaniam, Hariharan Subramaniam. Hariharan Subramony and Tan Teing Ee.

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