Health characteristics of rural elderly Malay females in selected villages in Negeri Sembilan

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Summary

Health indices of 317 healthy elderly Malay females 55 years and older from two rural sub-districts in Negeri Sembilan were collected through personal interviews. About 33% of the respondents perceived their health condition as good to excellent, 63.4% rated their health status compared to a year earlier as about the same, 48.3% had no worry about their health, and 49.2% perceived themselves as physically active as their peers. Arthritis was the major ailment which affected the daily activities of about 64% of the respondents. The classical age-related problems of poor hearing, poor sight and difficulty in chewing were also prevalent among these elderly.

Key words: health indices, elderly, Malay females.

Introduction

Over the next few decades, Malaysia is expected to experience a rapid increase in the number and proportion of elderly in its population. According to the 1980 census, 3.6% of the population in Peninsular Malaysia consisted of people aged 65 years and older. In the year 2000, the estimated projection for this segment of the population is 4.8%. For those who are 55 years and older, they are projected to increase from 8.1% of the population in 1980 to 10.4% in the year 2000.[1]

There is a paucity of available data on the elderly in Malaysia, primarily due to the fact that Malaysia is still categorised as a "young" country. Typical of most developing countries, Malaysian society has its own system of family and kinship which provides for the needs of the elderly. Cultural norms encourage this trend since filial piety is deeply respected. However, urbanisation, industrialisation, modernisation, and socio-economic changes are rapidly affecting the lifestyle and well-being of the elderly in many developing countries like Malaysia. Therefore, in recent years, in the wake of changing social trends, there has been growing interest in and concern for the health and well-being of the elderly in Malaysia.[2-4]

With the aging process, the elderly are anticipated to have many health and nutritional problems that will demand increasing attention and resources from the government. Unfortunately, baseline

data to guide the Malaysian government to formulate policies and plan programs with respect to the elderly population are generally lacking. The purpose of the study,[5] therefore, was to examine selected health and nutritional status indicators of selected Malaysian elderly. The population chosen for this investigation was elderly Malay females 55 years and older in selected rural areas in the state of Negeri Sembilan. The health characteristics of the respondents are presented in this paper.

Materials and methods

Two sub-districts, Nilai and Lenggeng, in the state of Negeri Sembilan were selected for the study. Data was collected from 14 villages in Nilai and 13 villages in Lenggeng for seven weeks during June and July, 1988.

The population sampled was limited to healthy, ambulatory Malay females 55 years of age and older residing in the selected rural villages. Subjects were identified by visiting the headman in each village and obtaining permission to visit village households. In each household visited, all Malay females 55 years and older were invited to participate in the study. Personal interviews were conducted in the local language by six trained interviewers in the homes of the respondents. Initially, 347 elderly were contacted; 30 refused to be interviewed, yielding a refusal rate of 8.6%.

Several approaches were used to evaluate the perceived health status of the elderly females. Each respondent was asked to rate her overall health compared to other women her age; her present health compared to a year earlier; the amount of worry her health had caused her during the past year; and her level of physical activity compared to her peer group. Each respondent was asked if any of eight ailments (heart disease, high blood pressure, urinary or kidney problems, respiratory problems, anemia, cancer, diabetes and arthritis) had disrupted her daily activities in the past year and if so, whether the ailments had been medically diagnosed. In addition to the above health conditions, the respondent was asked to rate the frequency that she experienced problems with walking, standing, hearing, seeing, chewing, tasting, smelling, constipation and diarrhoea. Information was also obtained on the respondent's most recent visit with a physician, health care worker or local medicine man regarding her health, and on the recent use of prescription, over-the-counter and traditional medications.

The Statistical Package for the Social Sciences–X (SPSS–X) computer program was used to analyse the data.[6] Frequencies and measures of central tendency were determined for all items. Chi-square tests were performed to investigate differences between nominal level variables and correlations were investigated by computing Pearson's Product Moment correlation coefficients. The statistical probability of < 0.05 was considered to be significant.

For data analysis, health score was computed by counting each subject's self reported diagnosis for the eight health ailments. A complaint score was calculated for each respondent using the rating of 'all the time' = 3, 'sometimes' = 2, and 'never' = 1 for the following nine variables: trouble walking, standing, hearing or seeing; difficulty in chewing; poor taste or sense of smell; and constipation and diarrhoea.

Results

Description of the sample: Selected demographic characteristics of the participants are presented

Table 1
Demographic characteristics of rural elderly Malaysian female subjects (n = 317)

Characteristic	No. of respondents	Percent
Sub-district		
Lenggeng	177	55.8
Nilai	140	44.2
Age group (years)		
55 – 64	180	56.8
65 – 74	97	30.6
75 – 84	33	10.4
85 and over	7	2.2
Income per month (Ringgit)		
$200 or less	81	25.5
$201 – $300	68	21.5
$301 – $400	50	15.8
$401 – $500	37	11.7
$501 or more	81	25.5
Employment status		
Housewife	240	75.7
Work part time	70	22.1
Had worked and retired	7	2.2
Education (years)		
None	202	63.7
1 – 4	77	24.3
5 – 7	36	11.4
8 or more	2	0.6
Literacy[a]		
able to read	88	27.8
able to write	67	21.1
Marital status		
married	144	45.4
widowed	155	48.9
divorced	18	5.7
No. of living children		
none	10	3.2
1 – 4	115	36.3
5 – 8	138	43.5
9 or more	54	17.0

[a] Multiple responses possible

in Table 1. About 56% of the subjects were from the sub-district of Lenggeng, while 44.2% were from the sub-district of Nilai. The mean age was 64.5 years, and the ages ranged from 55 to 110 years (Median = 63 years). The majority (74.5%) had monthly incomes of $500 or less. The average monthly income was $406 and the incomes ranged from about $50 to $2,700 per month (Median = $330). Although more than three-fourths of the respondents had never been employed outside the home, 22.1% still worked part-time as farmers, labourers or rubber tappers.

About 64% of the sample had never attended school. Only 12.0% had five or more years of formal education. The mean and median length of education was three years. The low level of education was reflected in the respondents' limited ability to read and write. On the average, 42.5 years was the length of time the respondents had been married. About 45% of the elderly were still married, while 54.6% were either widowed or divorced. The majority (60.5%) had five or more living children.

Self assessment of health: Table 2 presents selected health characteristics of elderly respondents in this study. Overall, 33.2% of the respondents perceived their state of health, when compared to their peers, as good to excellent. Comparing their health status to a year earlier, 63.4% indicated their health was about the same. Almost half of the respondents (48.3%) indicated their health condition was not causing them any worry. About 49% perceived themselves about as physically active as their peers.

Chronic illnesses and health problems: Of eight ailments common to the elderly, arthritis was the most frequently reported by 64.0% of the respondents. However, only 46.8% reported that it had been medically diagnosed. Respiratory problems and high blood pressure were the next most frequently cited ailments, 16.1% in both cases, and 46.8% and 96.1% of those citing these ailments, respectively, reported that they had been medically diagnosed. The remaining five of the eight ailments were each reported by less than 10.0% of the respondents. About three-fourths of the respondents reported that at least one of these eight ailments had curtailed their daily activities in the past year.

Table 3 presents the percentage of respondents experiencing nine health complaints common to elderly persons. Over 75% of the respondents reported never experiencing problems with poor taste, poor sense of smell, diarrhoea, constipation and hearing. Difficulty associated with walking, standing and chewing was quite common, with about 40.0% reporting such problems either all the time or sometimes. Visual problems were the most common of the nine health complaints among the elderly in this study. About 70% reported having problems with their sight sometimes or all the time.

Use of health services and medication: The use of health services and medication are presented in Table 4. A visit with a physician or health care worker within the last year was reported by 73.5% of the respondents. Illness was the main reason reported by 35.6% of the respondents for the most recent visit with the physician or health care worker. Only 26.3% had visited a local medicine man or "bomoh" within the last year. Of those who consulted the medicine man during the last year, 37.9% reported consulting the "bomoh" to get traditional treatment for illness or fever.

Use of prescribed medication and traditional medication within the last month were each reported by 41.3% of the respondents. Only 27.1% reported using over-the-counter medicines. Some of the reasons given by respondents for having taken prescribed medicines were for hypertension (22.1%), pain in the joints (19.1%) and illness or fever (17.6%). About 66% of those who had

Table 2
Health characteristics of elderly respondents (n = 317)

Variable	No. of respondents	Percent
Perceived state of health compared to peers[a]		
excellent	3	0.9
good	102	32.3
fair	152	48.1
poor	51	16.2
don't know	8	2.5
Health status compared to one year ago		
better than one year ago	41	12.9
about the same	201	63.4
worse than one year ago	73	23.0
don't know	2	0.6
Amount of worry concerning health status		
a great deal	34	10.7
some	129	40.7
none	153	48.3
don't know	1	0.3
Physical activity compared to peers		
more active	57	18.0
about as active	156	49.2
less active	95	30.0
don't know	9	2.8
Ailments[b]		
arthritis	203	64.0
respiratory problems	51	16.1
high blood pressure	51	16.1
anemia	31	9.8
heart disease	12	3.8
diabetes	9	2.8
urinary or kidney problems	5	1.6
cancer	2	0.6
Total number of ailments (health score)[c]		
0	76	25.9
1	131	44.6
2	61	20.7
3	19	6.5
4	7	2.4

[a] n = 316 [b] multiple responses possible [c] n = 294

taken over-the-counter medication reported having taken it for illness and fever, while 23.0% reported having taken it for arthritis or pain in the joints. Traditional medicines were reportedly

taken mainly for pain in the joints (47.7%), health maintenance (14.6%) and to increase the appetite (6.9%).

Statistical relationships between variables: Statistically significant relationships were found between the demographic characteristics of the sample and several of the health variables. For example, self-perception of health was negatively correlated with age ($r = -0.13, p < 0.05$), with younger respondents more likely to have positive perceptions of their health. Similarly, the frequency of reportedly experiencing nine health complaints, as reflected by the complaints score, was positively correlated with age ($r = 0.46, p < 0.001$). Thus, older respondents were more likely to report a higher frequency of the nine complaints. Finally, rating of health status compared to a year earlier was positively correlated with educational level ($r = 0.32, p < 0.001$). Thus, respondents reporting higher education levels were likely to rate their present health compared to a year earlier more positively.

Subjects' ratings for several of the health variables were significantly related. Self-perception of health compared to peers was negatively related to amount of worry due to health ($r = -0.32$, $p < 0.0001$) and complaints score ($r = -0.48$, $p < 0.001$). Thus, respondents reporting less worry about their health or a lower frequency of common health complaints were more likely to perceive their health status positively. In addition, respondents reporting fewer health ailments were more likely to have a higher self-perception of health compared to their peers ($r = -0.29$, $p < 0.001$).

The ratings of physical activity compared to peers were also more likely to be high by respondents reporting less worry about their health ($r = -0.38$, $p < 0.001$), fewer reported health ailments ($r = -0.30$, $p < 0.001$) and lower frequency of health complaints ($r = -0.38$, $p < 0.001$).

There were also significant differences between use of prescribed medicines and selected health variables. Respondents who perceived their health status as good were less likely than those who perceived it as fair or poor to report use of prescribed medicines ($X^2 = 22.91$, $df = 3$, $p < 0.001$). The use of prescribed medicines also tended to increase with an increase in the health score ($X^2 = 36.16$, $df = 3$, $p < 0.001$) and complaints score ($X^2 = 15.94$, $df = 2$, $p < 0.001$). That is, respondents being more pessimistic about their health. Similar results on the health status of elderly Malaysians have been reported by Andrews et al.[2] and Chen.[3]

Discussion

The actual and self-perceived health status of the elderly are affected by many interacting variables including economic and social factors, environment, living arrangements and physical and mental status. In this study, a majority of the elderly perceived their health as fair, with the older respondents being more pessimistic about their health. Similar result on the health status of elderly Malaysians has been reported by Andrews et al.[2] and Chen.[3]

Since arthritic disease affects bones, joints and connective tissue and impedes the body's ability to move, it was not surprising to note that a majority of the respondents reported that this ailment disrupted their daily activities in the past year. Arthritis as the most common ailment has also been frequently reported among elderly in more developed countries like the U.S. and Canada.[7,8]

Poor sight, poor hearing and difficulty in chewing, were some of the classical age-related health problems that were prevalent among the elderly in this study. Similar findings have been reported

for elderly in Malaysia.[2,9] The use of health aids such as spectacles, hearing aids and dentures, can have a great impact on the physical, social and mental well-being of the elderly, and on their participation in activities of daily living. Therefore, such appliances should be made accessible and affordable to the elderly, especially those in the rural areas.

This study also revealed quite a high usage of health services and medication. Previously, rural family members were more likely to attribute any illness or ailment among the elderly to old age, and not to seek medical care. With better education among family members and easier accessibility to private and public health services, more attempts are now being made to send the elderly to a physician for medical care. Nevertheless, a small proportion of elderly in this study still resorted to traditional treatment.

With increased usage of prescription and over-the-counter medication among the elderly, there is increased risk of drug-drug and drug-nutrient interactions.[10] Future studies should look at these issues, including identifying the number and types of medication consumed by the elderly. In addition, the effect of traditional medicines on other drugs as well as their effect on absorption and utilisation of specific nutrients are important areas of concern.

Conclusion

With the aging process, the health of elderly generally deteriorates and multiple ailments or health complaints are quite common among some elderly individuals. In order to alleviate some of these health conditions and maintain the health and fitness of the aging population, a considerable amount of resources have to be allocated. Health policies and programs needs to be formulated to ensure equitable access to health care for all elderly in need and to promote preventive measures to minimise the consequences of chronic diseases and other debilitating conditions.

Although Malaysia has comprehensive health and medical services, there is no special program for the elderly and no geriatric hospitals or specialised wards. Primary health care is basically available in most rural areas, although the focus has been on maternal and child health services. Thus, the opportunity to base health education and prevention programs for the elderly within the primary health care service should be explored. Prevention should be the keyword in maintaining a healthy elderly population. Therefore, the potential of establishing health, nutrition, and fitness programs should be initiated and targeted at young and middle-age adults as well as older individuals.

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