

# **THE HEALTH DETERMINANTS OF ELDERLY MALAYSIAN POPULATION**

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## **ABSTRACT**

Improved living conditions and advances in the medical field have helped to increase the ageing population of the world. While the developed countries are better equipped to cushion the burden of caring and sustaining the medical expenses of their growing number of elderly population, developed countries face challenges to support and care for their elderly. Earlier elderly studies focused on morbidity, psychological and economic sustainability conditions of the elderly. While more recent studies have begun to emphasise importance of social networking, community participation and health and its implications for government expenditure. This paper is part of a nationwide research. A total of 10 percent of total elderly population was interviewed to obtain detailed socioeconomic and lifestyle information. A total of 1410 elderly respondents aged 60 and above were interviewed from the regions of northern, eastern, middle and southern Peninsular Malaysia and also from Sabah and Sarawak. The respondents were stratified by gender and locality. The data was analysed using the SPSS 16 programme. Quantitative analysis based on mean, standard deviation and multiple regressions was done. Findings show that the health determinants of the elderly were exercise, regular medical check-ups and having health problems.

## **INTRODUCTION**

The sandwich generation in Malaysia is burdened with caring and supporting their children and their aged parents. Being part of eastern culture, it is quite normal to find families with their extended families living together. Nevertheless, the living style of the western counterparts have begun to take shape in Malaysia and today there is a growing number of elderly people living with their spouse or living alone compared to living with their children or relatives.

Regardless of an older person's residential status, it is important to note the health conditions of that person. An elderly person who is not mobile, have vision impairment or other serious medical ailments need constant check-up, medical attention and healthcare. This is costly and if the elderly person is not financially able to support him/herself then the family or the government will be burdened. Recognizing the importance of health regardless of age, the researchers have undertaken this research to investigate the health determinants of the elderly population in Malaysia.

## **LITERATURE REVIEW**

Study by Doris Padmini Selvaratnam et. al. (2009) has shown that the government's expenditure for pension and healthcare has been rising steady and if not checked, it will lower the budget available for other developmental purposes. Study by Norlaila et. al. (2009) on the other hand emphasise the fact that the elderly women, are more marginalized and at a disadvantage in socioeconomic aspects of their lives.

Van Solinge (1994) finds that those with health problems need special care and medication, therefore their willingness to stay at the nursing home is higher. Tajvar, et. Al (2008) note that age, gender, education and economic status were significant *determinants* of poorer physical *health*-related quality of life of the elderly in Tehran, Iran.

### Data Source and Descriptive Analysis

Empirical data was collected from field survey using a structured questionnaire in 2007/2008. Data is obtained from elderly persons aged 60 and above (age group using the definition used by the United Nations and the Malaysian Welfare Department) in regions of northern, eastern, middle and southern Peninsular Malaysia and also from Sabah and Sarawak. Enumerators were employed to help collect the data. Research questionnaires were administered during interview with respondents at study locations. While most of the older persons wanted to answer the questions asked verbally, some chose to fill in the answer themselves. Data was processed using SPSS version 16.

This study used a stratified purposive sampling according to ethnicity, income groups (lower, middle, upper), stratum (rural and urban), and region. The sample size is 1410, which is approximately 10 % of total population of older persons in Malaysia. From the total number of respondents, 50 % male and 50 % female, with 53 % in urban area and the balance 47 % from rural area. The elderly had a mean income of RM1935.17 before retirement and after retirement it declined to a mean of RM 1366.74. The ethnic ratio was Malays (55%), Chinese (31.4%) Indians (6.7%) and Others (6.7%). The Others comprised of Sabah and Sarawak's indigenous community members like the Bajau, Belihoi, Bidayuh, Bugis, Dayak, Iban, Kadazan, Kadazan Dusun Cina, Kadazan Dusun Cina, Kayan, Kelabit, Kenyah, Melanau, Saban, Murut, Orang Sungei, Punan and the Rungus people; the Peninsular Malaysia's Orang Asli (indigenous community), Eurasian, Baba or Nonya community's older people. Sample size was selected based on purposive sampling method. The data was processed using the SPSS version 16 program and the quantitative analysis was done based on the frequency and cross-tabulations results.

### RESEARCH METHODOLOGY AND MODEL SPECIFICATION

A simple multiple regression model is used to investigate the health determinants of the elderly population in Malaysia.

#### The Multiple Regression Model

The multiple regression model is used to investigate the health determinants of the elderly population in Malaysia. Health status is self defined by the individual respondents. To estimate the multiple regression model, the following model is used:

$$y = f(\text{Gender, Strata, Age, Status, Education Level, Exercise, Consume Healthy Diet, Regular medical check-up, Expenditure for Health, Health Problems, Consume Supplements, Desolate, Lonely, Health Insurance and Life Insurance, } \varepsilon)$$

where the dependent variable,  $y$  is current health status as reported by the elderly respondents, while the independent variables are Gender, Strata, Age, Status, Education Level, Exercise, Consume Healthy Diet, Regular medical check-up, Expenditure for Health, Health Problems, Consume Supplements, Desolate, Lonely, Health Insurance and Life Insurance., and  $\varepsilon$  is the error term.

The results of the multiple regression model is shown in Table 1.

TABLE 1: Multiple Regression Analysis Results

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.996	.172		11.610	.000
Gender	.023	.030	.019	.767	.443
Strata	.056	.029	.048	1.914	.056
Age	.043	.015	.075	2.829	.005
Status	.072	.022	.085	3.252	.001
Education Level	-.037	.017	-.060	-2.145	.032
Exercise	.130	.032	.105	4.064	.000
Consume Healthy Diet	.055	.031	.047	1.779	.076
Regular medical check up	.142	.037	.102	3.820	.000
Expenditure for Health	.019	.010	.046	1.887	.059
Health Problems	-.493	.031	-.416	-15.757	.000
Consume Supplements	.008	.030	.006	.251	.802
Desolate	-.016	.058	-.011	-.275	.783
Lonely	.016	.062	.011	.254	.799
Health Insurance	.070	.050	.047	1.409	.159
Life Insurance	.084	.048	.058	1.735	.083

Dependent Variable: Health Status as reported by the elderly respondents

Significant at 0.05 level

R = 0.562 R<sup>2</sup> = 0.316 F = 35.802

The most positive significant variable as a health determinant of the Malaysian elderly population is exercise (Beta=0.130) and undergoing regular medical check-ups (Beta = 0.142), while the most negative significant health determinant is having health problems (Beta = -0.493). Education level also has a negative impact (Beta = -.037) on the elderly respondents' health status. Probably the more educated person becomes, there is more awareness on socioeconomic needs that are not being met for maintaining a person's lifestyle after retirement. This can lead to higher stress and lowers the health status.

Individuals need to take care of their health on a regular basis from young. Having a healthy diet, balanced meal, conscious of the calorie intake, eating moderately and exercising regularly can help maintain the health status of a person. Furthermore, in Malaysia one of the leading causes of health problem in excessive intake of sugar and salt, this also needs to be taken moderately. Besides taking care of one's physical health, an individual also needs to take care of the emotional and spiritual health status. Having a calm and peaceful disposition can help keep stress at bay. The item of feeling desolate has a beta of -.016 reflecting its negative impact on the elderly person's health.

Health problems are a major hindrance of healthy lifestyle for the elderly. The research survey shows that there is a high percentage of respondents with no health problems (45.27 %), while a total of 35.53 % reported having 2 health problems and only 0.05 % having more than 4 health problems. The higher the economic well being of the respondent, the lesser morbidity incidences experienced. This is

probably due to the fact that having better income, the elderly is able to purchase supplements and get regular medical check-ups. This is shown in Table 2.

TABLE 2: The Mean Of Economic Well Being According To Number Of Morbidity

Number Of Morbidity	N	Economic Well Being	
		Mean	Std. Deviation
0	618	1632.83	10839.739
1	485	737.85	932.085
2	209	778.67	1246.782
3	46	649.78	711.900
>4	7	566.68	443.493
Total	1365	1145.46	7342.401

Source: Field Survey 2007/2008

## POLICY IMPLICATION AND CONCLUSION

In terms of policy implication, it is important that the aged homes run by the government agencies and also by other private and voluntary organizations conduct regular physical exercise for the elderly and also have scheduled regular medical check-ups so that their medical needs are well looked after on a regular basis.

Care for the elderly is not the obligation of the government. The government delivers services for the elderly as part of the social welfare services. This is due to the inability of elderly persons to care for themselves, indicating that planning for the golden years should have started when one is in the prime time of their career and physical health.

Besides having pension schemes or SOCSO, social safety net can be further reinforced if individuals voluntarily save a minimum of 10 percent of their monthly income for retirement. Good savings habit can eventually help individuals to plan their daily budget and spend wisely. Caring for personal hygiene and upkeep of physical and mental health will help ensure that individuals are healthy body and mind and increasing healthy longevity.

The study confirms that exercise and regular medical check-ups can help determine the health status of an elderly person. Besides this, it is also important that an elderly person takes care of his/her health so that the number of morbidity does not rise with age. Progressive health problems can reduce mobility and also hinder one from having a mobile and good social networking in society.

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