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Research Article

Physical and Psychiatry Diseases of Aged People in Malaysia: An Evaluation in Ampang, Selangor, Malaysia

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Abstract: Ageing is now not only a problem in developed countries but also in developing countries. Malaysia is no exception to this. The main objective of this paper is to identify the physical and mental and phychiatry problems of aged people in Malaysia and the demographic factors associated with those living in Ampang, an urban area near Kuala Lumpur, Malaysia. A random survey of every fifth member of the aged community above 69 years old were selected for sample survey from Ampang Public Hospital and an old folks' home. The samples selected were interviewed using a pre-tested structured questionnaire which included the GDS-30, ECAQ and Barthel Index. Out of 300 elderly residents approached (not more than 7% of the total population), 240 agreed to participate in the study, giving a response rate of 80%. The mean age of the respondents was 70 years old +7 years with a median of 70 years. The chronic illness and functional dependence of the surveyed aged people in Ampang were 60% and 16%, respectively. Depression is associated with problems of no income, not enough income or unemployment ($p<0.05$) whereas cognitive impairment was significantly associated with age, gender, ethnicity, married status and level of education ($p<0.05$).
Keywords: Aged people, Physical illness and mental illness, Ampang, Malaysia.

INTRODUCTION

Mental illness or mental disorder is one of the serious problems especially among aged people. The trend among aged people today is that more and more of them are suffering from physical and mental disorder in the developed as well as developing nations. Until recently, physical illness is recognized in society where as emotional insecurity, mental disturbance, psycho-social depression are not recognized as illnesses. The behaviour of a mentally ill person could sometimes pose a threat to the community [1]. The word "health" is subject to all kinds of definition and interpretation. Mere absence of physical illness is not an indication of good health as a healthy person is subjected to the following conditions: (a) has a sound body, (b) is happy and contented, (c) is capable of living in harmony with others and (d) tries his best to make others happy [2]. Unfortunately, the four conditions do not apply to most people. Globally, mental disorder and behavioural disorder represented 12% of the world's diseases in 2000 and had increased to 15% in 2005. Depression is the fourth largest contributor to all diseases. There are 450 million people with mental disorder around the world, 150 million have depression and one million commit suicide every year.

Because of better health care facilities, less birth mortality and longer living, the number of aged people over 65 years old is increasing in developed countries like Malaysia [3]. Tan SK [4] also speaks of the increasing number of aged people globally, especially in developed countries. With the improvement in science and health care, fewer babies die at birth and more and more people live longer in society [5, 6]. There are currently 10% of aged people, more than 65 years old globally. In 2050, it is expected to increase to 20%. In Malaysia, aged people who are more than 60 years old reached one million in 1997 and increased to 1.5 million in 2000. In 2050, it is predicted to reach 4 million.

Ebrahim S [7] also mentions that developing nations may face more difficulty in coping with the aged population. With more aged people, there would be more money needed for social facilities for the aged and unproductive people in the population. It could burden the economy, societies and families of the nation. More facilities must be prepared to cater for the aged people. For instance, toilets must be suitably built for them. Besides, more medical doctors and medicines and therapies must be provided for the aged. Even though more aged people are found in developed countries than developing countries, there is great difficulty for developing countries like Malaysia and others to solve the problems of physical and mental diseases of the aged people as the financial resources

are limited in these nations compared to those of developed nations. Shahar *et al*. [8] state that frequent visits to hospitals and the need for more medical facilities for aged people are becoming more necessary.

Malaysia is very much a diversified nation with a population of about 28 million from different ethnic groups and adhering to a variety of religions. The main ethnic group in Malaysia consists of the Malays, who constitute the majority of more than half of the population. This is followed by the minority groups of Chinese and Indians. Islam is the official religion in Malaysia and of the Malays while there are other religious faiths of Buddhism, Taoism, Christianity and Hinduism. In the states of Sabah and Sarawak, there are natives of smaller ethic groups such as Kadazan, Dayak, Iban and others. The various ethnic groups celebrate their festivals throughout the year and their customs and value systems too are different from one another. The Malays and the natives are known as *bumiputra* whereas the Chinese and Indians are non-*bumiputra*.

This research seeks to study the problems and challenges of aged people in Ampang, Selangor in Malaysia with regard to the physical and mental diseases in the country through the use of a survey. This field work is limited to the area of Ampang of which the samples consist of the Malays, Chinese, Indians and people from other races.

Social Forces and Ageing Problems

Ageing is a complex and fascinating process. It involves many aspects of one's living; namely psychological, emotional, cognitive, economic and interpersonal, between members of a family and within a community. It is also fascinating because the changes could be different for each individual ageing person. Ageing is also part of the life cycle that attracts the media, businessmen, industry and the general public. Changes in the number and proportion implicate the structure of families and social amenities such as adequate housing and recreational services, health facilities, social safety scheme like insurance and pension for the elderly population. Private and public planners need to think of more amenities for the elderly if their number is very high like in Japan [9].

To many people, ageing can be seen in signs that appear in one's body like greying hair, balding, wrinkled skin and the changing of the organs and systems like the heart, lungs, kidneys, bladder and others as well as the nervous system. The relative efficiency of the life span is determined. As far as the various organs and systems within us are concerned, it involves significant loss and decline in some of the physiological functions and minimal changes of others. This process is universal; all man experience the same processes. It also results in physiological decline. It is gradual and the loss cannot be corrected or stopped although sometimes the process is slowed down by doing exercises or following a certain dietary regime. At old age, this could be followed by various kinds of diseases [10].

Heart disease is one of the diseases that can be the result of ageing processes but it is not truly a form of disease. Over 27.1% of people ageing 65 or above are limited by heart conditions (Standard Abstract, 1988). The most wide spread form of heart disease is *coronary artery disease* or alternatively known as ischemic heart disease and is the major killing disease in the United States and other industrialized nations. Its incidence does increase with age. This is a common cause of death for the middle-aged and increasingly in elderly people. Coronary artery disease is the deficiency of blood reaching the heart because of the narrowing of blood vessels, causing damages to the heart tissue. There are two major contributors of coronary artery disease; firstly, *Atherosclerosis* which is the accumulation of fat, cholesterol crystals along with other substances at the interior walls of the arteries, reducing the passageways and secondly, *Arteriosclerosis* which is the hardening of the artery. Both causes of the disease can occur at the same time. High blood pressure is also a contributor to coronary artery disease [11].

Strokes and other cerebrovascular problems of old age could be due to tissues being denied adequate nourishment because of change of blood in the vessels supplying it. Similarly, *Atherosclerosis* and *Arteriosclerosis* can affect the function of the brain because of change in the supply of blood to the brain. This impaired brain tissue circulation and malfunctioning of the brain is known as cerebrovascular accident or stroke. Many elderly people with heart problems are also at risk of cerebrovascular disease. 80% of the causes for 200,000 deaths occur when the persons are aged 65 years old or more [12].

Cancer is the cause of death for 25% of those aged 65 and above especially cancer of the stomach, lung, intestines and pancreas. 55% of cancer occurs and is diagnosed after 65 years of age. Cancer of the bowels is malignant in those aged 70 and above and is second to lung cancer. Lung cancer is the cancer with the highest number of deaths for those over 65 years, especially cigarette smokers. Women also face cervical and breast cancer. Diagnosing cancer is difficult because of old age and the existence of other chronic diseases such as weight loss, weakness or fatigue. The elderly also do not seek diagnosis of the disease [13].

Moreover, the elderly also face gradual biological changes in their body over time. It may not necessarily be connected to diseases. But ageing and diseases are often linked since decline in organ capacities and internal protective mechanism causes the elderly people to become more vulnerable to illnesses. Stress, the loss of hearing and sight, and heart diseases

are present in people who have reached old age although different people have different degrees of these changes. This process is universal, gradual, occurs over time and cannot be corrected by organism [14].

The various trends of losing one's hearing and sight, and various chronic diseases experienced by old people can be slowed and can be prevented by exercises or medical aid but only for a short time as they cannot be totally stopped or reversed. We must have more clinics and counselling for the aged people to reduce their stress and make them more acceptable of their situation; if possible allow them to be accepting of life in this situation.

METHODOLOGY

This research deeply engages in library research in discussing the concepts of physical and mental health of the aged people. The survey is done in Ampang at the hospital and old folks' home. In Malaysia, the concern on the aged population is not as serious as in Japan as the aged population here is less than one in ten of those more than 69 years old whereas in Japan every one in four is more than 65 years old. However, the number of aged people in Malaysia is increasing. There is a likelihood that more homes suitable for the old people must be built in the future. More social facilities for the aged must also be set up. More counsellors for the aged, more trained medical personnel for the aged as well as enough psychiatric specialists for the aged people to look after their problems must be produced.

The objectives of this study are to determine the prevalence of physical and mental health problems of the old people in Malaysia and to determine the link between their health problems with socio demographic factors of Malaysia through a survey done among the elderly (N=300) in a rural community in Ampang, Selangor. A cross sectional study design was used. The fifth out of nine aged patients in an Ampang hospital and home of aged people were selected via random sampling. The elderly in the hospital and the old folks' home were interviewed using a pre-tested structured questionnaire which included the GDS-30, ECAQ and Barthel Index. Out of 300 elderly residents (7% of the total population), 240 agreed to participate in the study giving a response rate of 80%. The mean age of the respondents was 70 years old + 7 years with a median of 70 years. The prevalence of physical health problems such as chronic illness and functional dependence were 62.5% and 17.7%, respectively while the prevalence of mental health problems such as depression and cognitive impairment were 7.8% and 22.6%, respectively. Among the health problems studied, depression was found to be significantly associated with unemployment or no income or having an income of less than RM1000 ($p<0.05$), where as cognitive impairment was significantly associated with age, gender, ethnicity, marital status and level of education ($p<0.05$). The survey was done in 2013.

The questionnaire or field work was carried out in the month of June 2013 for three weeks from June 3 to June 24, 2013. Only old people who could understand and still speak were chosen as respondents for this project. Translators were chosen for Tamil language for Indian samples. As the researcher could also converse in Chinese, there was no problem of posing questions in Chinese to the Chinese respondents. Malay language is used in the questionnaire for the Malay and *orang Asli* (the Aborigines) respondents.

The number of aged people is expected to increase and in anticipation, there must be increasing health care and social amenities prepared for them. Meanwhile, the family and social community support could decrease the number of aged people admitted to hospitals. Preventive care and social community work can decrease the burden of an increasing ageing population [15]. However, besides health care support, family and community help, the care for the functional capacity of the people's physical bodies and their mental equilibrium is essential.

A cross section of the aged people was selected in Ampang which has a population of 123,055 people. However, the population for this study is N=300. Out of this, only 260 people were willing to answer the questionnaire. The survey first covered their age, gender, ethnicity or race, married status, living arrangement, occupation, income, education as well as the mental condition of cognitive situation, depression and family income. Data were analysed according to the Statistical Package for Social Science (SPSS) at the significance of $p=<0.05$.

In this study, the physical and mental health of the aged were measured. Chronic diseases and functional dependence/ability are the physical illnesses of the aged people whereas cognitive impair and depression are the mental illnesses. Health problems were chosen based on the frequent experiences of the aged people.

The following diseases had been selected to test the physical health of the aged people. These are hypertension, diabetes mellitus, respiratory disease (bronchial asthma and chronic obstructive pulmonary disease), ischaemic heart disease, osteoarthritis and gout were selected to represent chronic illnesses. All these diseases were included in the questionnaire.

Barthel's Index (BI) was used to measure the functional dependence/ability of the physical body of the aged people. Seven daily activities of life (ADL) were chosen and this is shown in Table 2 ADL refers to the help needed by the aged people to perform their basic functions [16].

Table 1: Demographic Profile on Sample of Aged People living in Ampang hospital and old folk's home (N=300)

Demographic Profile	Frequency	Percentage
Age		
69-70 years	170	56%
70-79 years	80	27%
80 years above	50	17%
Gender		
Female	165	55%
Male	135	45%
Ethnicity/Race		
Malay	180	60%
Chinese	70	23.33%
Indian	40	13.33%
Orang Asli	10	3.33%
Marital Status		
Married	180	60%
Divorce/ widow	120	40%
Living Arrangement		
Living in old folks' home	30	10%
Living with family	270	90%
Occupation		
Not working	240	80%
Working	60	20%
Income		
Less than RM1000	240	80%
More thanRM1000 or no income at all	60	20%
Education		
Illiterate	150	50%
Finished primary school	120	40%
Finished secondary school	30	10%

Table 2: Functional Capacity of Respondents (N=300)

Activities of Life (ADL)	Frequency	Percentage
Eating and drinking	0	0%
Wearing clothes	0	0%
Bathing	2	0.8%
Bladder control	30	10%
Bowel Control	24	8%
Movement to bed	36	12%
Mobility need of wheelchair	51	17%

The Geriatric Depression Scale (GDS) consisting of 30 questions was used to screen for depression. The total scores ranged from 0 to 30. Based on the GDS guidelines, a cut-off score of more than 10 was used to identify depression [17].

The Elderly Cognitive Assessment Questionnaire (ECAQ) was used to screen for cognitive impairment among the elderly respondents. The ECAQ consists of 10 items grouped under three categories: memory (3 items), orientation (6 items) and memory recall (1 item). Each item has a weightage of one mark for correct response. Respondents with scores of 5 and below were identified as having cognitive impairment [18].

RESULTS

The data of Chronic Diseases

The mean age of the surveyed respondent was 70 years old +/- 7 years with the median of 71 years. The ages of females were higher than the males with their mean age 71 +/- 8.3 years which was higher than the males' 69 +/- 71. The difference is not statistically significant as Mann Whitney test =5560, z=1.4 significant p=<0.05. The female samples were 165 or 55% of the total where as male samples were only 135 or 45% (Table 1 and 2).

Table 3: Socio demographic profile of the elderly respondents (n=300) in Ampang

Social Demogrphic Profile	Number	Percentage Absentee	Present	Percentage
Age				
60-69	180	40%	180	60%
70-80	90	70%	90	30%
Above 80	30	90%	3	10%
Gender				
Depression	234	90%	26	10%
Cognitive Impairment	220	76.7%	40	23.3%

One hundred and fifty-five out of 265 aged people or 60% have chronic diseases. They have been diagnosed as having chronic illnesses such as hypertension, diabetes mellitus, ischaemic heart disease, bronchial asthma or gout. Some have two chronic diseases while some three (Table 2-5). The main cause is that they are very old. Only 40% of the respondents are healthy without any chronic disease.

Table 4: Physical and Mental Condition of Aged People in the Survey (N=300)

Health Problem	Absent	Percentage	Present	Percentage
Chronic disease	109	40%	156	60%
Functional Dependence	223	94%	37	16%
Depression	234	90%	26	10%
Cognitive Impairment	220	83.7%	40	23.3%

1.

2. Table 5: Physical Diseases of the aged people (N=300)

Chronic Diseases	Frequency	Percentage
No chronic disease	109	40%
Hypertension	75	25%
Diabetes Mellitus	30	10%
Respiratory Disease	12	4%
Ischaemic heart disease	9	3%
Gout	9	3%
Glaucoma	6	2%

Table 6: Respondents with Two Chronic Diseases (N=300)

Presence of Two Chronic Illnesses	Frequency	Percentage
Hypertension and diabetes	30	10
Hypertension and Ischaemic heart disease	3	1
Hypertension with Gout	3	1

Table 7: Respondents with Three Chronic Diseases (N=300)

Presence of Three Chronic Illnesses	Frequency	Percentage
Hypertension and diabetes and Ischaemic heart disease	6	2
Hypertension and Diabetes Mellitus and Gout	3	1
Hypertension, Respiratory Disease and Gout	3	1

Among the chronic diseases, elderly respondents in this study suffered from hypertension (n=75 or 25%), diabetes mellitus (n=30 or 10%), respiratory (n=12 or 4%), Ischaemic heart disease (n=9 or 3%), gout (n=9 or 3%) and glaucoma (n=6 or 2%). This is similar to the findings of Shahar S *et al*. [8] and Leung & Lo [19] of which among the most frequent chronic diseases were hypertension and diabetes mellitus. According to Shahar *et al.*'s [8] finding, the most frequent ailment for old people are joint pains which is about 40% but the second chronic disease is hypertension (20.2%). As joint pains are not considered as a chronic disease, it is not taken as a topic under chronic diseases. For Leung & Lo, rheumatism was found at 34.4% and hypertension at 32.2% among their respondents.

The Barthel Index (BI) measured the functional dependence of activities of daily life (ADL). Chan *et al*. [16] and Salleha K [20] also did the same study in Singapore and Sepang, Malaysia, respectively. The rate of functional dependency in this study is 16% which is lower than Chan *et al.*'s [16] 1990 study in Singapore where the rate was determined at 17% and higher than Salleha's [20] 2001 study in Sepang where the rate was determined at 15.1%. The most important of the functional dependence were bladder control or urinary inconvenience (10%) (Table 6).

Elderly Cognitive Assessment Questionnaire (ECAQ) Scores

The mean ECAQ score was 7.68 + 0.166 and the median score was 8.00. The scores ranged from 3 to 7. Based on the ECAQ scores, 50 out of 300 respondents (22.4%) had scores of 5 or less. The study shows that the prevalence of cognitive impairment among the elderly in Mukim Ampang was 22.4%. Cognitive impairment among the elderly was significantly associated with age, gender, ethnicity, marital status and level of education.

Geriatric Depression Scale (GDS) Score

The mean GDS score was 4.45 ± SD 3.87 and the median score was 3.21. The scores ranged from 0 to 27. Based on the GDS scores, 17 of the respondents were found to have depression.

Therefore, the prevalence of depression among the elderly in Ampang was 7.8%. In this study, only unemployment was found to be significantly associated with depression among the elderly (p=0.04) (Table 7).

Table 7: The Rate of Cognitive Impairment and Depression among Respondents (N=300)

	Cognitive Impairment			Depression		
	Present	**Absent**	**%**	**Present**	**Absent**	**%**
Age						
60-69 years	10	160	5.9	11	159	6.5
70 years above	40	90	31	11	119	9
Ethnicity/Race						
Malay	54	126	30	12	168	6.6
Chinese	14	56	20	7	63	7
Indian	14	36	35	3	37	7
Orang Asli	6	4	60	1	9	10
Marital Status						
Married	27	180	15	6	108	6
Not married	40	80	33.3	12	108	10
Occupation						
Working	12	6	33.3	0	18	0
Not working	89	103	32	28	274	10
Income						
> RM1000	15	150	10	7	150	5.7
< RM1000 or no income	56	114	35	14	160	9
Education						
No formal education	36	84	30	11	110	10
With formal education	12	108	10	5	105	4.7

DISCUSSION

The females in the survey were much older than the male respondents and there were more females than males in this study. It is generally a fact that females live a longer life than males in Malaysia. The mean longevity of females is 75.5 whereas for males, the mean is 69.9 [21]. Table 1 earlier shows that the percentage for female respondents stood at 55% while the percentage for male respondents stood at 45%. This is in line with the findings by Tan PC [22].

In Malaysia, the old folks' home is generally set-up by non-governmental organization and is generally funded by donations by the public. However, Muslims and non-Muslims generally do not live in the same home. In Ampang, the old folks' home is for the Chinese and other non-Muslims. This is due to the different religious and cultural requirements, but the elderly do have the same problems such as worsening of physical health and suffering from depression and cognitive impair, with increasing growth in age. However, most of the aged Malays live with their families in rural areas whereas the high numbers of Chinese old folks' home in towns indicate that many old Chinese people stay away from their families. In Ampang, there is an old folks' home near a temple for the Chinese.

However, a large number of elderly people can be found living together with their families, some three generations of grandparents, parents and grandchildren. This could be due to the filial piety of the eastern Malays, Chinese and Indians. The Islamic teachings and Chinese and Indian civilizations do not have many differences in terms of respecting and honouring the old. This is the difference between the aged people in Malaysia and those in the West and the USA where living alone without their children or grandchildren is the norm [23].

Chronic Diseases

It is normal for many aged people to suffer from chronic diseases. As old systems of the cells of the physical body wear out and are replaced by new cells, it is certain that those of old age may have certain kinds of malfunctions. This is the cycle of life. No one can stop it. However, we must be conscious of it and accept it. We must not take extreme actions to commit suicide as is occurring in the West and the USA. In the USA, the suicide rate of the aged population is 15% of all suicides [9]. In Malaysia, however, there is very few news or information relating old age and chronic disease to suicide.

Functional Dependence

All the respondents can eat, drink and wear clothes without any help. However, there are problems related to urinating control and others. Yet, these do not pose big problems to the old men or women. Help is ready when the old people live with the young generation.

Depression

Studies in the USA indicate that 8%-20% of aged people suffer from depression [24]. Nevertheless, this study only shows that 7.8% of the respondents suffer from depression. Two past studies done in Malaysia showed that the rates of depression were 14% [25] and 18% [26]. Having no income and being unemployed can be reasons for depression. In Malaysia, the civil servants had to retire upon after reaching 60 years old. The number of the uneducated is high among people more than 60 years old as before independence in 1957, education was not wide spread and so earning was not high. The number of the unemployed in the sample was very high. This could contribute to depression. Unemployment also gives rise to dependence on others for financial matters. This is showed by two studies where depression is detected among the old [27, 6].

Cognitive Impairment

Twenty-three percent of the respondents in this study suffered from cognitive impairment based on the findings of the survey. This is in line with the finding by Krishnaswamy S [28] who claims that 24% of Malaysian old people in urban settlements have cognitive impairment. Increasing age is also making it easier to get cognitive impairment. People more than 70 years old have a higher tendency to suffer from cognitive impairment than people 60 years old or less [29]. Unmarried old people and the widowed are more likely to have cognitive impairment than married people [28]. Uneducated people too are likely to have cognitive impairment [30].

CONCLUSION

Malaysia is moving towards becoming an industrial and developed nation by 2020. It is venturing into a society with more old age people. Now, no more than 10% of the people are elderly but with low mortality birth rate and longer span of life, more and more Malaysians are become older and they face the physical and mental or psychiatric problems. The data surveyed in Ampang show depression and cognitive impairment are very much part of the problems of aged people. Chronic diseases like functional dependence on others and poor bladder and bowel control too occur frequently. This is in line with findings from other studies. In view that physical and mental problems are national phenomena, there must be more social amenities in our society which should suit the aged people like toilet-friendly facilities for the old people. Besides, there must be more activities organized by the government like sports for the aged and homes for the old people.

In Malaysia, the welfare department does give subsidies to the private establishments to raise funds, build old folks' homes and look after the aged people. The government also organizes sports annually for the Malaysian society. However, all these are not enough. The families of old aged people, the society and the nation should also know that aged people need love and care from their families and they should treat the aged people as they are. Understanding them, giving them love and cheering them are important so that they will not feel meaningless in life but just wait for their last breath of their lives.

A large number of the elderly in proportional to the total population can cause economic, social, family problems in society. The unemployed old age people cannot contribute to the GNP of the nation. They can be a burden to their families, society and nation. The government needs to provide monetary funds for social amenities including public transport catering for the aged people. However, most importantly, the people must have the right kind of understanding towards aged people and in words and deeds, demonstrate kindness, care and love and make the aged people happy. Of course, more physical infrastructure and hospital facilities and other social amenities such as paths and gardens suitable for old age people to relax are necessary.

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