The Attitude Towards Ageing Among Residents Of An Elderly Care Institution In Penang Malaysia

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ABSTRACT

Introduction: Negative attitude towards ageing has been linked to detrimental psychological, physical and health outcomes for older adults

Aims and objectives: The objective of this study was to determine the attitude towards ageing among the residents of one of the largest privately owned elderly care institution in Penang, Malaysia.

Methods / Study Design: This cross sectional study was conducted among the elderly residents of a non-governmental charity elderly care residential institution in Penang, Malaysia. The Attitude towards Ageing Questionnaire (AAQ) was used. In addition sleep quality, quality of life, functional independence in the activities of daily living and body mass index was measured. Data was analysed using PASW version 18.

Findings: Out of the total 200 residents, 151 responded to the survey. Majority considered age group 60 to 69 and health status, appearance and level of fitness as the criteria to consider someone aged. The mean AAQ score (76.6) as well as the mean scores for the psychosocial loss (24.3), physical change (25.8) and psychological growth (26.5) domains were slightly above average suggesting a positive trend in the attitude towards ageing. The differences for the scores for marital status (p=0.007), musculoskeletal pain past 12 months (p=0.03), education (p=0.007), people that could be counted on for help (p=0.001), feasibility of getting practical help from fellow residents (p=0.01) and self-perception of health (p=0.02) were found to be statistically significant. Liner regression showed that the increase in the quality of life (p=0.011) and positive sleep quality (p=0.032) was associated with a positive attitude towards ageing.

Conclusion: Family and informal social caring networks are essential to the care of the elderly

Keywords: Elderly, attitude towards ageing, Malaysia

INTRODUCTION

The population of Malaysia increased from 23.3 million in 2000 to 28.3 million in 2010. Malaysia's population consists of Bumiputera (67.4%), Chinese (24.6%), Indians (7.3%) and Others (0.7%). Penang, which is one of the 13 states in Malaysia, has a total population of 1.56 million and it is one of the most densely populated state in the country. The population of the world is ageing and Malaysian is no exception. The indicators of the 2010 census suggest the transition of age structure towards an aging population. Average annual population growth in Malaysia from 2008 to 2010 was 2% which is a decrease from the 2.6% growth reported in the previous two censuses. The proportion of the population of Malaysia below the age of 15 years decreased to 27.6% in 2010 from 33.3% in 2000 whereas the proportion of population aged 65 years and over increased to 5.1% from 3.9% [1].

Ageing affects different people differently. The definition of successful ageing includes physical, functional, psychological and social health [2]. It is a myth that physical deterioration and illness is part of the ageing process and that older adults become more intolerant and conservative in old age [3]. Most elderly are fit and live active and independent lives. Older people in Asia prefer staying with families rather than living alone and they consider having no filial children as bad [4,5]. Living with or close to family members helps provide psychological, social and physical needs and because most Asian countries are not welfare states this bond is maintained [6] however due to various reasons the family support towards the elderly is waning [7] and coupled with the loss of spouse and the inability to care for self, there has been an increase in the admissions of the elderly into institutional care facilities. This pattern of living arrangement has caused social implications for the older adults.

Feeling older does not necessarily mean the individual will feel bad. It has been shown that older people have a positive attitude in aspects of development and adaptation in older age and they believe that ageing has positive features including growth and development [8]. It has been suggested that as one ages negative emotions are experienced less frequently and intensely hence ageing experience rated by older people are more positive [9]. Attitudes relevant to healthy ageing is greatly influenced by traditions, religious and cultural beliefs [10,11]. When an individual has unfavourable attitude towards ageing they experience negative outcomes [12]. Negative attitude towards ageing has been linked to detrimental psychological, physical and health outcomes for older adults and may influence the choices they are likely to make in regards to the levels of activity, independence and control that they have over their lives including rejecting medical help. In the western society there is a negative impression towards ageing

which indirectly influences the older adults attitude towards ageing [14,15] whereas studies have shown that there are more positive ageing attitudes in Asians as compared to western cultures [16].

As Malaysia is at an early stage of having an aged population there has been relatively few studies conducted on geriatrics and gerontology. Literature search had not shown any studies conducted on the attitudes of the elderly towards ageing in Malaysia. The objective of this study was to determine the attitude towards ageing among the residents of one of the largest privately owned elderly care institution in Penang, Malaysia.

METHODOLOGY

Setting: This study was conducted in a 200-bed non-governmental charity elderly care residential institution in Penang, Malaysia. The eligibility of being admitted into this institution includes those aged 60 and above, has no person to care for them, homeless or lacking funds for self-care.

Study Design: This cross sectional study was conducted from May to November 2011

Sampling: Only residents of this institution who consented and were not debilitated with an illness which rendered them unable to communicate effectively were recruited into this study.

Tools: The data was collected by the researchers using a questionnaire especially designed for this study. Besides the baseline demographic information the participant's attitude to ageing was measured using Attitude to Ageing Questionnaire (AAQ). AAQ is based on the opinion of the elderly on their experience of ageing. The scale has three domains which include psychological growth, psychosocial loss and physical change. Higher total scores for the psychosocial loss component indicate a negative attitude to ageing whereas higher total scores for the physical change and psychological growth components indicate a positive attitude to ageing. The scores for the psychosocial loss domain was reversed in order to be in line with the other domains where a higher score reflects a more positive attitude to ageing. The total score on the AAQ was used to give an indication of the attitude to ageing. Higher total scores of the three domains indicate a positive attitude to ageing [15]. The sleep quality of the respondents was measured using the Pittsburgh Sleep Quality Index (PSQI). PSQI is a reliable tool consisting of seven components including (a) subjective sleep quality (b) sleep latency (c) sleep duration (d) habitual sleep efficiency (e) sleep disturbances (f) use of sleep medication and (g) day time dysfunction. Each component is rated on a likert scale ranging from '0 – 3'. '0' represents the absence of any disorder and 3 represent maximum disorder. The sum of the scores range from 0 – 21, a higher score suggests poorer sleep quality. PSQI has a sensitivity of 89.6% and specificity of 86.5% [17]. In addition, the quality of life of the respondents was measured using WHOQOL-BREF. This scale has four domains which are physical, psychological, social and environment. Higher scores suggest higher quality of life [18]. Barthel index which is a well-established and commonly used nursing tool was used to assess the functional independence in the activities of daily living (ADL) of the participants. Body mass index which is used to accurately determine a person's nutritional status was also calculated.

Analysis: Data was tabulated, cross tabulated and analysed using PASW version 18. Inferential analysis was done using t tests. Regression analysis was attempted to determine the predictive risk factors. A probability value of $P<0.05$ was considered to be statistically significant.

Ethics: All respondents were asked to give an informed written consent before starting the interview. The anonymity of the respondents is assured.

RESULTS

Out of the total 200 residents, 151 responded to the survey. As shown in table 1 most of the respondents were between the ages 70 and 79 (47.7%), female (54.3%), Chinese (98.7%), Taoist (82.1%) and single (56.9%). Most of them either had non-formal education or the highest level of education was up to primary school (40.4%). Majority were working as labourers previously (39.1%). Most perceived that they did not have anyone that they could count on for help (64.2%) and they were uncertain if people took interest in them (45.0%). However most answered that it was possible to get help from fellow residents (70.2%) but substantial respondents answered that they had no one as their main source of emotional support (29.8%). Majority perceived their health to be very good (35.8%) and their activities of daily living was not limited due to ill health (65.6%). However majority had some form of chronic illness (62.3%) and suffered from musculoskeletal pain in the past 12 months (66.2%). The mean PSQI, Barthel, BMI, and WHOQOL BREF score was 7.1 (SD 3.4), 16.8 (SD 4.5), 21.5 (SD 4.5), and 69.4 (SD 11.6) respectively.

As shown in table 2, according to the participants the age when one is considered old ranged from 50 to 100 with a mean age of 64.5 years old. Majority considered ages between 60 and 69 (45.7%) as the age when someone should be considered old. The most common responses to what criteria were considered for someone to be aged was health status (78.1%) followed by appearance (56.3%) and level of fitness (51.7%). In the psychosocial loss domain the higher scores indicated a positive rating because of the reversal in the scoring in order to be in line with the other domains where higher scores reflect a more positive attitude to ageing. The total mean score as well as the mean scores for the three domains were slightly above average suggesting a trend towards positive attitude towards ageing. The total attitude towards ageing score ranged from 45.0 to 112.0 with a mean score of 76.6. The psychosocial loss domain had the lowest mean score of all the domains The mean score for the psychosocial loss, physical change and psychological growth domain was 24.3 (SD 7.8), 25.8 (SD 5.8) and 26.5 (SD 5.6) respectively.

The mean score of the single/widow/divorce was higher than those who were married (p=0.007) and the mean score of the respondents who had no complaints of musculoskeletal pain past 12 months was higher than those who had (p=0.03). The differences in the mean scores for the level of education (p=0.007), people that could be counted on for help (p=0.001), feasibility of getting practical help from fellow residents (p=0.01) and self-perception of health (p=0.02) were found to be statistically significant. Post hoc test showed the mean score for those with non-formal/primary education was higher than the mean score of the illiterates. The mean score of the respondents who considered they had 3 people who could be counted on for help was higher than the mean score of the respondents who considered they had no one who could be counted on for help. The mean score of respondents who had a very good self-perception of their health was higher than the mean score of the respondents who had fair/poor perception of their health (table 3).

Table 4 shows the differences for the variables marital status, education, people that could be counted on for help, feasibility of getting practical help from fellow residents, self-perception of health and musculoskeletal pain past 12 months to the different components of the AAQ scale.

Only the psychosocial loss and psychological growth component had significant results. For the psychosocial loss component the mean score of the single/widow/divorce respondents was higher than those married (p<0.001), those who had no musculoskeletal complaints was higher than those who did (p=0.005), those who had non-formal/primary education higher than the illiterates (p=0.001), those who considered they had≥3 people who could be counted on for help higher than those who considered they had no one (p<0.001) and those who considered it was easy getting practical help from fellow residents higher than those who considered it was possible (p=0.001). For the psychological growth component the mean score of those with secondary school/tertiary education was higher than the illiterate (p=0.04), respondents who considered it was easier and possible to get practical help from fellow residents was higher than respondents who considered it was difficult (p=0.01) and respondents with a very good self-perception of health had a higher mean score than those with fair/poor perception (p=0.006).

There was a positive correlation between the AAQ score and the QOL score (Pearsons correlation 0.374 p=<0.001) and there was a negative correlation between the AAQ score and the PSQI score (Pearsons correlation -0.332 p=<0.001). A liner regression was attempted to determine the significant predictive variables associated with the AAQ scores (table 5). QOL, PSQI, ADL, BMI scores, marital status, education, people that could be counted on for help, feasibility of getting practical help from fellow residents, self-perception of health and musculoskeletal pain past 12 months were taken as predictor variables. 28.1% (R^2 0.281) variability in the AAQ score was explained by the variables in the model. Increase in the quality of life (p=0.011) and positive sleep quality (p=0.032) was associated with a positive attitude towards ageing.

DISCUSSION

Age is often used as a way of inferring others abilities and competencies [19] and age prejudice and discrimination is how an individual see themselves [20]. In this study majority considered age group 60 to 69 and health status, appearance and level of fitness as the criteria to consider someone aged. In a study to analyze the attitudes towards ageing in Britain, over 6000 respondents underwent face to face interview between 2004 and 2008. The study found that by mid-30's most respondents stopped describing themselves as young and by their mid-70's most started describing themselves as old. On the average the respondents judged that old age starts at 63 years of age [20]. In another survey conducted on 1507 Australians by the Australian Psychological Society showed most respondents considered those in the 80's to be aged and health status, fitness and appearance as factors that contributed to someone to be considered old [21]. Although research has not showed any linear relationship between ageing and declining health or ability [22] older people often view ill health and old age as strongly linked [23].

In the present study the total mean score as well as the mean scores for the three domains were slightly above average suggesting a trend towards positive attitude towards ageing. The psychosocial loss domain had the lowest mean score of all the three domains. Similar results were obtained in a survey conducted in Australia [21]. In the present study the psychosocial loss and psychological growth component showed the importance of social ties with fellow residents and self-perception of health. In the present study education and marital status were other influences. However linear regression showed a close relationship between the attitude towards ageing and the quality of life and sleep quality.

Social networks are important for the well-being of older adults [24,25]. Social support is the emotional and practical support that one garners from family and friends, and as one age this support diminishes due to losses in friends and family. Older adults perceive healthy ageing more than just physical, mental and social functioning but rather including family and adaptation [26] thus most elderly Asian expect filial piety and family centred care. In a study conducted by Laidlaw et al. older Chinese immigrants living in UK and Beijing had higher expectations than UK born participants for filial piety. In that study, there was a significant difference between the groups in the domains of psychosocial loss and physical change [27]. However, due to the change in the family structure, loss of spouse and inability to care for self, has led some elders to be institutionalized [28]. The new experience of living in an institution may lead to the feeling of isolation [29].

Attitude, perception and belief of the elderly towards themselves affect the quality of life and sleep quality of the elderly. The psychosocial component of the AAQ scale values the close relationships with members of the community and involvement in activities. Poor social relationships has also been linked with poor sleep quality [30] and it affects the quality of life [31]. Environment which is an important component of the WHOQOL-BREF is strongly associated with quality of life in respect to social interaction, activity involvement, independence and psychological wellbeing [32,33]. Hence it is not surprising to find that increase in the quality of life and positive sleep quality was associated with a positive attitude towards ageing.

Although musculoskeletal pain, education and marriage were not found to be statistically significant in the regression analysis, poor physical state and deficits in functional autonomy have been shown to be a deterrent to affective social functioning [8] which is important for successful ageing. Lack of education which can lead to poor paying jobs which is in turn a reason for financial insecurity can be a reason for poor attitude towards ageing as well. Studies have shown that older woman are comfortable maintaining an independent lifestyle and own ability to care for themselves and that they perceive marriage as costly to their freedom and they are comfortable and enjoy living alone and being actively involved in their work [34,35].

CONCLUSION

Social networks, social support and practical support of family and friends are important. This component forms an important influence in the quality of life and sleep quality which in turn has a positive influence in the elderly's attitude towards ageing. Administrators of the institutions for the elderly should be made aware of the importance of social interaction, involvement in activities and psychological wellbeing and how essential family and informal social caring networks are to the care and the needs of the elderly.

This study was conducted in a well-resourced private institution. It is imperative to replicate similar studies in other bigger government institutions which have lesser resources to see if similar positive trend in the attitude towards ageing is found.

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TABLES

Table1 Base line profile of the respondents

SR	Variables	Frequency	Percentage
1	**Age**		
	60-69	27	17.9
	70-79	72	47.7
	≥80	52	34.4
2	**Sex**		
	Female	82	54.3
	Male	69	45.7
3	**Race**		
	Chinese	149	98.7
	Others	2	1.3
4	**Religion**		
	Taoist	124	82.1
	Buddhist	16	17.9
	Others	11	57.0
5	**Marital status**		
	Single	86	56.9
	Married	38	25.2
	Widow/divorce	27	17.9
6	**Education**		
	Illiterate	56	37.1
	Non formal/primary school	61	40.4
	Secondary school/tertiary	34	22.5
7	**Previous occupation**		
	labourer	59	39.1
	Skilled	42	27.8
	Non skilled	33	21.9
	Housewife	17	11.3
8	**Next of Kin**		
	Family	73	48.3
	Alone	50	33.1
	Others	28	18.5
9	**People that could be counted on for help**		
	None	97	64.2
	1 or 2	33	21.9

	≥ 3	21	13.9
10	**Interest taken by others**		
	People take interest	65	43.0
	Uncertain	68	45.0
	Little or None	18	12.0
11	**Feasibility of getting practical help from fellow residents**		
	Easy	37	24.5
	Possible	106	70.2
	Difficult	8	5.3
12	**Main source of emotional support**		
	Relatives	54	35.8
	No one	45	29.8
	Friends	43	28.5
	Spouse	5	3.3
	Staff at institution	4	2.6
13	**Daily activity limited due to ill health**		
	Yes	52	34.4
	No	99	65.6
14	**Self-perception of health**		
	Excellent	17	11.3
	Very good	54	35.8
	Good	47	31.1
	Fair	28	18.5
	Poor	5	3.3
15	**Chronic illness**		
	Yes	94	62.3
	No	57	37.7
16	**Musculoskeletal pain past 12 months**		
	Yes	100	66.2
	No	51	33.8
17	**Activities of daily living**		
	Mean score (SD)	16.8 (4.5)	
	Independent	114	75.5
	Needs minimal help	22	14.6
	Dependent	15	9.9
18	**BMI**		

	Total Score – Mean (SD)	21.5 (4.5)	
	Under nutrition	43	28.5
	Normal	80	53.0
	Overweight	21	13.9
	Obese	7	4.6
19	**PSQI** Mean (SD)	7.1 (3.4)	
20	**Quality of life** WHO QOL BREF Mean (SD)	69.4 (11.6)	

Table 2 base line data on the attitude towards ageing questionnaire

Attitude towards Ageing	Frequency	Percentage
Age when someone is considered aged		
Minimum	50	
Maximum	100	
Mean (SD)	64.5 (10.1)	
50-59	24	15.9
60-69	69	45.7
70-79	39	25.8
≥80	19	12.8
Criteria considering someone to be aged		
Health status	118	78.1
Eligibility for pension	13	8.6
Work status	71	47.0
Appearance	85	56.3
Outlook/attitude to life	27	17.9
Level of fitness	78	51.7
Age of retirement	26	17.2
Total Attitude to Ageing score		
Minimum	45.0	
Maximum	112.0	
Mean (SD)	76.6 (14.5)	
Different component of attitude towards ageing scale **Psychosocial loss**		
Minimum	11.0	
Maximum	40.0	
Mean (SD)	24.3 (7.8)	

Physical change		
Minimum	16.0	
Maximum	40.0	
Mean (SD)	25.8 (5.8)	
Psychological growth		
Minimum	12.0	
Maximum	40.0	
Mean (SD)	26.5 (5.6)	

Table 3 comparison of the mean of the overall attitude scores of the different variables

SR	Variables	Overall attitude Score Mean (SD)	t test or ANOVA (F) / p value	Post Hoc
1	**Age**			
	60-69	77.1 (15.7)	0.71 / 0.49	
	70-79	77.6 (14.2)		
	≥80	74.3 (14.5)		
2	**Sex**			
	Female	74.6 (15.0)	1.92 / 0.06	
	Male	79.1 (13.4)		
3	**Race**			
	Chinese	76.6 (14.5)	0.11 / 0.91	
	Others	75.5 (21.9)		
4	**Religion**			
	Taoist	75.7 (14.2)	1.32 / 0.27	
	Buddhist	81.4 (4.22)		
	Others	79.5 (13.6)		
5	**Marital status***			
	Single / Widow/divorce	78.4 (13.5)	-2.73 / 0.007	
	Married	71.2 (16.1)		
6	**Education***			
	Illiterate	71.8 (14.3)	5.18 / 0.007	Non formal/primary
	Non formal/primary school	79.8 (13.8)		>illiterate
	Secondary school/tertiary	78.8 (14.3)		
7	**Previous Occupation**			
	Labourer	77.8 (14.2)	1.71 / 0.18	
	Skilled	74.6 (13.3)		

	Non skilled	79.7 (14.2)		
	Housewife	71.3 (17.7)		
8	**Next of Kin**			
	Family	74.8 (13.8)	1.12 / 0.33	
	Alone	78.1 (15.9)		
	Others	78.7 (13.5)		
9	**People that could be counted on for help***			
	None	74.0 (14.6)	5.07 / 0.001	≥ 3 > None
	1 or 2	79.8 (13.6)		
	≥ 3	83.6 (12.3)		
11	**Feasibility of getting practical help from fellow residents***			
	Easy	82.0 (12.6)	4.56 / 0.01	Easy>difficult
	Possible	75.4 (14.9)		
	Difficult	68.1 (10.3)		
12	**Self-Perception Of Health***			
	Excellent	76.9 (15.2)	3.44 / 0.02	Very good>fair/poor
	Very good	81.1 (14.7)		
	Good	74.9 (12.3)		
	Fair /Poor	71.5 (15.0)		
13	**Chronic Illness**			
	Yes	75.7 (13.9)	0.97 / 0.33	
	No	78.1 (15.3)		
14	**Activities Of Daily Living**			
	Independent	77.4 (14.7)	0.960 / 0.385	
	Needs minimal help	75.6 (15.6)		
	Dependent	72.1 (14.5)		
15	**BMI**			
	Under nutrition	76.5 (12.8)	0.321 / 0.810	
	Normal	75.9 (14.3)		
	Overweight	78.3 (18.9)		
	Obese	80.4 (13.0)		
16	**Main Source Of Emotional Support**			
	Relatives	73.7 (15.9)	2.29 / 0.06	

	No one	75.7 (14.0)	
	Friends	80.9 (12.7)	
	Spouse	85.2 (10.9)	
	Staff at institution	69.5 (7.77)	
17	**Musculoskeletal Pain*** **Past 12 Months**		
	Yes	74.8 (14.6)	2.14 / 0.03
	No	80.1 (13.7)	

*significant

Table 4 comparison the mean of the three components of the attitude towards ageing questionnaire with selected variables

	Psychosocial loss	**Physical change**	**Psychological growth**
Marital status - Mean(SD)			
Married	20.4 (7.14)	24.7 (5.89)	26.1 (5.87)
Single / Widow/divorce	25.6 (7.54)	26.2 (5.75)	26.6 (5.51)
t / p	-3.717 / <0.001	-1.34 / 0.82	-0.58 / 0.56
Education - Mean(SD)			
Illiterate	21.9 (6.95)	24.5 (6.06)	25.5 (6.10)
Non formal/primary school	26.9 (8.09)	26.4 (5.69)	26.3 (5.18)
Secondary school/tertiary	23.6 (7.07)	26.7 (5.35)	28.5 (5.02)
ANOVA (F) / p	7.07 / 0.001*	2.29 / 0.105	3.22 / 0.04*
Post Hoc	Non formal/primary >illiterate		Secondary school/tertiary>illiterate
People that could be counted on for help - Mean(SD)			
None	22.4 (6.98)	25.3 (6.09)	26.3 (5.52)
1 or 2	25.9 (7.06)	26.7 (4.63)	27.2 (5.73)
≥ 3	30.5 (8.66)	26.7 (6.100	26.4 (5.86)
ANOVA (F) / p	11.9 / <0.001*	0.97 / 0.38	0.034 / 0.74
Post Hoc	≥ 3 > None		
Feasibility of getting practical help from fellow residents - Mean(SD)			
Easy	28.3 (7.27)	26.3 (5.49)	27.4 (5.11)
Possible	23.1 (7.37)	25.6 (6.10)	26.6 (5.48)
Difficult	21.5 (9.27)	25.6 (2.88)	21.0 (6.69)
ANOVA (F) / p	7.31 / 0.001*	0.18 / 0.84	4.59 / 0.01*

Post Hoc	Easy > possible		Easy > difficult Possible > difficult
Self-Perception Of Health - Mean(SD)			
Excellent	24.6 (7.96)	27.0 (6.91)	25.2 (5.07)
Very good	25.9 (8.29)	26.9 (6.20)	28.2 (6.09)
Good	22.9 (6.92)	25.3 (4.97)	26.7 (4.71)
Fair /Poor	23.4 (7.71)	24.0 (5.32)	24.1 (5.32)
ANOVA (F) / p	1.41 / 0.24	2.15 / 0.09	4.34 / 0.006*
Post Hoc			Very good > fair/poor
Musculoskeletal Pain Past 12 Months- Mean(SD)			
Yes	23.1 (5.06)	25.5 (5.88)	26.3 (5.85)
No	26.8 (8.51)	26.4 (5.68)	26.9 (5.06)
t / p	2.85 / 0.005*	0.86 / 0.39	0.71 / 0.48

*significant

Table 5 Linear regression

	B	t	Sig.	95% CI
QOL score*	0.268	2.569	0.011	0.062;0.473
PSQI score*	-0.714	-2.166	0.032	-1.366;-0.62
ADL score	-0.142	-0.542	0.588	-0.657;0.374
BMI score	0.406	1.740	0.084	-0.055;0.867
Marital status	5.696	2.307	0.023	0.815;10.577
Education	1.571	1.069	0.287	-1.335;4.478
People that can be counted on for help	2.255	1.334	0.184	-1.086;5.596
Feasibility of getting practical help from fellow residents	-2.176	-0.925	0.356	-6.824;2.472
Self-Perception Of Health	-1.828	-1.568	0.119	-4.154;0.479
Musculoskeletal Pain Past 12 Months	-2.282	-0.984	0.327	-6.869;2.304

*significant