ACTIVITIES OF DAILY LIVING DEPENDENCY AMONG THE ELDERLY IN MALAYSIA

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INTRODUCTION

Preparing for an active ageing population is one of the concerns for Malaysia towards becoming an aged nation in 2030. Older persons are at risk of getting chronic diseases and illness. Being healthy is the key to being a healthy and independent older person. It requires the ability to perform the necessary actions daily. Basic activities comprise of actions pertaining to self-care such as personal care hygiene, continence management and ambulating

OBJECTIVE

• To determine the prevalence of activities of daily living (ADL) dependency among the elderly in Malaysia
• To examine the factors that are associated with ADL dependency

METHODS

Data for this study were obtained from the Fifth Malaysian Population and Family Survey (MPFS-5), a nationally representative survey conducted by the National Population and Family Development Board, Malaysia, in 2014. A two-stage stratified sampling method was used to select the living quarters in the MPFS-5. The survey was conducted between September 2014 and January 2015 through face-to-face interviews by trained interviewers using standardized questionnaires in all states in Malaysia. Data for 3,905 elderly respondents aged 60 years who provided all information needed in this study were extracted from the senior sample of the survey. The analysis was carried out using SPSS (Version 18). Descriptive analysis was conducted for socio-demographic variables and ADL dependency. The association between the variables was then analyzed using Chi-square test.

FINDINGS

Respondents' Profile

Analysis was started by describing the socio-demographic and socioeconomic characteristics of the 3,905 respondents. Table 1 shows the distribution of respondents according to their socio-demographic and socioeconomic characteristics

Table 1 : Socio-demographic and Socioeconomic Characteristics of Respondents

Characteristics	Percentage	Characteristics	Percentage
Gender		**Place of Residence**	
• Male	45.2	• Urban	54.7
• Female	54.8	• Rural	45.3
Age Group		**Marital Status**	
• 60 - 64	39.2	• Currently married	67.5
• 65 - 69	27.7	• Not currently married	32.5
• 70 - 74	17.5		
• 75+	15.6	**Educational Level**	
		• No formal schooling	20.0
Ethnic Group		• Primary	49.8
• Malay	65.0	• Secondary	24.8
• Chinese	18.0	• Tertiary	5.4
• Other Bumiputera	10.1	**Work Status**	
• Indian	6.9	• Yes	22.9
		• No	77.1

Activity of Daily Living

The ADL dependency is reported in three categories, namely independent, partially dependent and severely dependent. Most of the elderly are found to be independent in performing the ten basic ADLs that were listed. Among all the ADLs listed, the dependency to climb stairs was the highest. Some of the respondents also needed help to walk as only 86.6 percent said they could walk independently. Majority respondents could perform self-care activities such as feeding, grooming, dressing and bathing independently. Overall, 69.4 percent of the elderly can perform all the activities of daily livings independently.

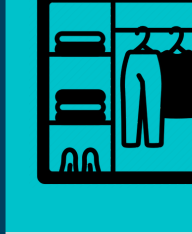#### Table 2 : Status of Activities of Daily Living among the Elderly in Malaysia

	Feeding	Bathing	Grooming	Dressing	Bowel Control
Independent (%)	97.6	96.9	97.6	97.1	94.4
Partially Dependent (%)	1.9	2.3	1.9	2.2	4.7
Severely Dependent (%)	0.5	0.9	0.4	0.7	1.0

	Bladder Control	Toileting	Moving in and Out of Bed	Dressing	Climbing Stairs
Independent (%)	94.9	93.0	87.8	86.6	72.2
Partially Dependent (%)	4.2	5.8	10.6	11.5	21.1
Severely Dependent (%)	0.9	1.2	1.6	2.0	6.7

Chart 1 : Self-Rated Health Status

Not Satisfactory **13.2%**
Good **34.6%**
Moderate **52.2%**
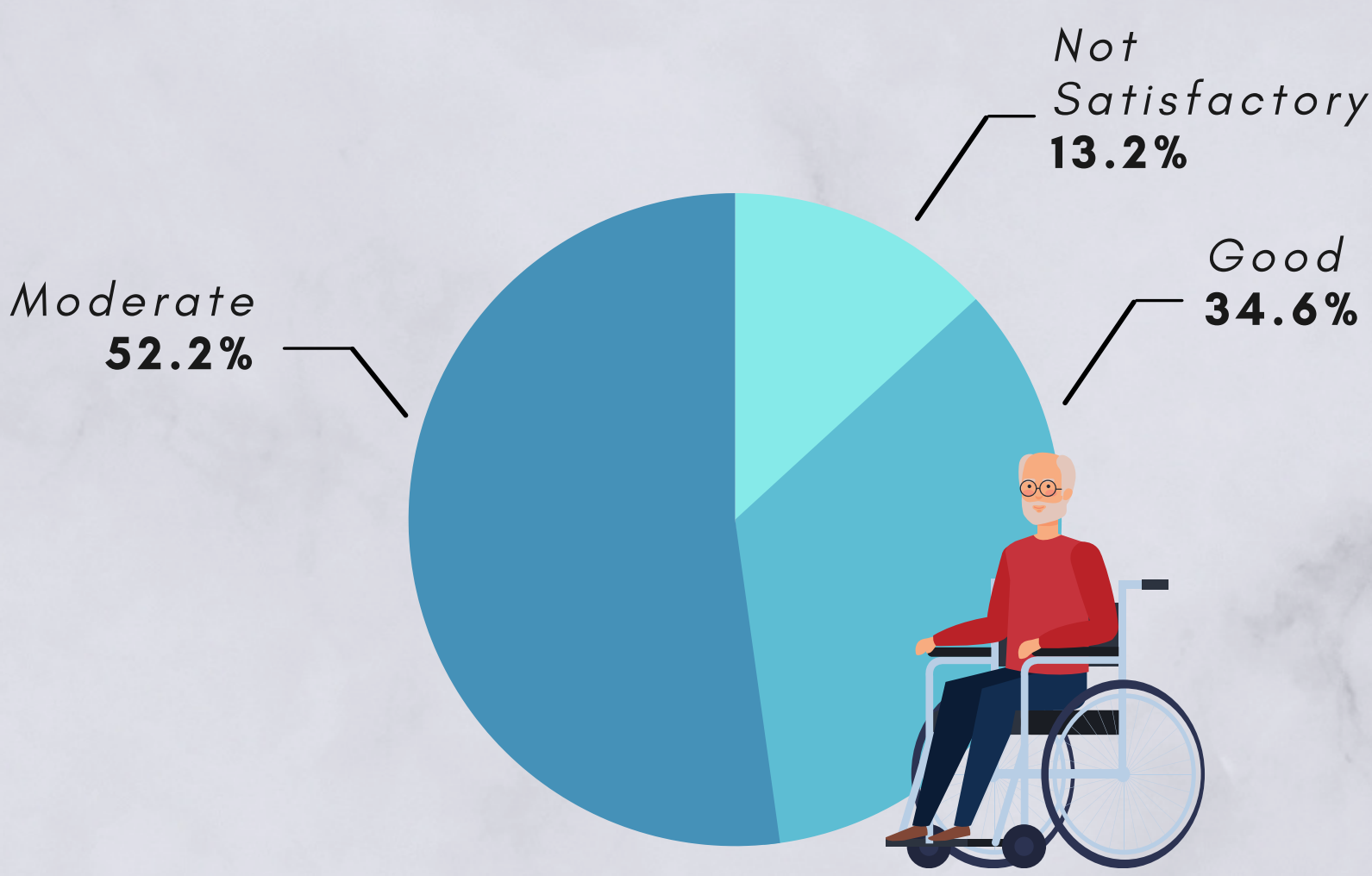
More than half (52.2%) of the respondents had moderate health status, and 75.3% had health problems with at least one of the problems as per in Chart 2.

Chart 2 : Health Problem

- High Blood Pressure — 52.5
- Arthritis — 39.4
- Diabetic — 28.2
- Coronary Heart Disease — 10.9
- Asthma — 8.6
- Gout — 8.3
- Kidney Problem — 5.3
- Stroke — 2.6
- Cancer — 1.6
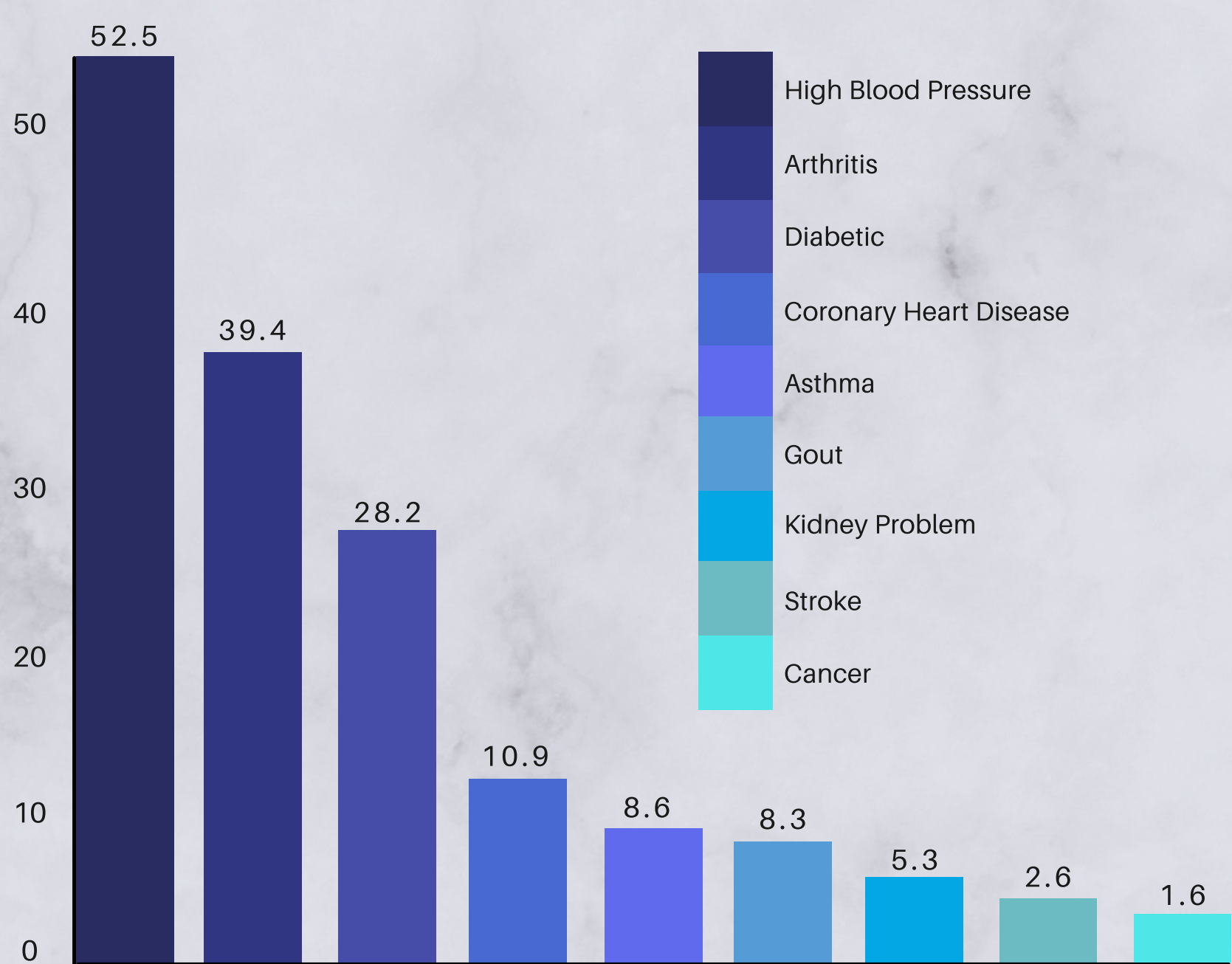
Factor Associated to Activity of Daily Living

The bivariate analysis showed that ADL dependency is significantly related to gender, age group, marital status, educational level, work status, self-rated health status and presence of health problems. **Male respondents are found to be more dependent compared to female respondents.** As for the age group, **ADL dependency increases with age.** The elderly who are **currently married, have higher education levels and are currently working have a higher percentage of independence** than their counterparts. In terms of health, the elderly with a **good health condition and no presence of any health problems are less dependent** on performing their daily living activities. There was no significant association between ADL dependency with ethnic groups and place of residence.

Table 3 : Chi-Square Analysis of Activities of Daily Living (ADL) Dependency with Its Factors

	INDEPENDENT	DEPENDENT	p Value		INDEPENDENT	DEPENDENT	p Value
GENDER				**MARITAL STATUS**			
Male	78.9	21.1	0.000*	Currently Married	74.1	25.9	0.000*
Female	61.6	38.4		Not Currently Married	59.8	40.2	
AGE GROUP				**EDUCATIONAL LEVEL**			
60 - 64	76.2	23.8	0.000*	No Formal	57.2	42.8	0.000*
65 - 69	71.5	28.5		Primary	68.4	31.6	
70 - 74	64.7	35.3		Secondary	77.4	22.6	
75+	54.0	46.0		Tertiary	87.2	12.8	
				WORK STATUS			
ETHNIC GROUP				Yes	81.8	19.2	0.000*
Malay	69.6	30.4	0.087	No	65.7	34.3	
Chinese	72.1	27.9		**SELF-RATED HEALTH STATUS**			
Other	65.0	35.0		Good	86.3	13.7	0.000*
Indian	67.4	32.6		Moderate	65.7	34.3	
				Not Satisfactory	39.9	60.1	
PLACE OF RESIDENCE				**PRESENCE OF HEALTH PROBLEMS**			
Urban	70.5	29.5	0.097	Yes	63.7	36.3	0.000*
Rural	68.1	31.9		No	86.9	13.1	

CONCLUSION

In conclusion, 30.6 percent of the elderly are unable to perform all the basic daily activities of daily living independently. ADL dependency is significantly related to gender, age group, marital status, educational level, work status, self-rated health status, and health problems.Thus, with functional decline as person ages, it is essential to support the ADL needs of the elderly as it is shown that some of them need support to complete all the activities included in the study. It is recommended for the elderly to receive sufficient care align with their needs in completing their daily activities.

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