Malaysia Ageing and Retirement Survey (MARS) Wave 1 - 2018/2019
A SNAPSHOT
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Faculty of Economics and Administration,
Universiti Malaya, 50603 Kuala Lumpur.
http://swrc.um.edu.my
MALAYSIA AGEING AND RETIREMENT SURVEY WAVE 1 – 2018/2019

A SNAPSHOT

Project Details

**Funded By**
Employees Provident Fund (EPF)
Malaysia

**Principal Investigators**
Social Wellbeing Research Centre (SWRC),
Universiti Malaya
Norma Mansor
Halimah Awang

**Research Team**
Faculty of Economics and Administration, Universiti Malaya
Nai Peng Tey
Sor Tho Ng

Faculty of Medicine, Universiti Malaya
Wah Yun Low
Noran Naqiah Mohd Hairi

**SWRC**
Nur Fakhrina Ab Rashid
Lih Yoong Tan
Nurul Diyana Kamarulzaman
Yamunah Devi Apalasamy
Alexander Lourdes Samy
Muhammad Hazim Noran
Mohd Zulfadhli Zakaria
Nur Azrin Abu Bakar
Noor Ismawati Mohd Jaafar

**Supported By**
Survey Research Center
Institute for Social Research
University of Michigan

Management Team
David Weir
Nicole Kirgis
Gina-Qian Cheung
Yu-Chieh (Jay) Lin

Technical Team
Brad Goodwin
Collate Keyser
Andrea Pierce
Ashwin Dey
Emmanuel Ellis
Lih-Shwu Ke
Marsha Skoman

**Report Prepared By**
Norma Mansor
Halimah Awang
Nur Fakhrina Ab Rashid
Lih Yoong Tan
Nurul Diyana Kamarulzaman
Yamunah Devi Apalasamy
Alexander Lourdes Samy
Muhammad Hazim Noran

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MESSAGE FROM EMPLOYEES PROVIDENT FUND (EPF) CEO

I would like to take this opportunity to congratulate SWRC for the successful completion of the Malaysia Ageing and Retirement Survey (MARS) project. The EPF is proud to be part of this strategic partnership with Universiti Malaya.

Savings adequacy and financial sustainability in old-age have become issues in recent years given our low-wage structure and relatively young age for mandatory retirement at age 60 compared with most developed nations. It has become more challenging for retirees to have a sustainable retirement in their golden years as life expectancy lengthens without adequate savings, especially in times of economic uncertainty and ever rising cost of living.

The EPF has always been concerned about our members’ savings adequacy at retirement as our own research has shown that many of them partially or fully withdraw all their retirement savings from their EPF account upon reaching 55. The EPF Act 1991 also provides for withdrawals for various reasons such as education, housing and health expenses before the age of 55. With many making full withdrawals before turning 60, there are concerns that should members continue working till age 60, they would still not be able to have sufficient funds for retirement.

We have been consistently advocating and educating our members on the importance of saving for their retirement while at the same time developing programmes and tools to promote and encourage them to save, which is why the MARS project is important in helping us address these concerns.

Besides our members, we have also in recent years turn our attention to the labour force that is not covered by either the government pension scheme or the EPF. We have reached out to this group of self-employed workers, home makers and gig-economy workers through voluntary contribution schemes such as the i-Suri for housewives.
Given that we do not have data on this diverse but under-studied group, the MARS study provides us with a wealth of information that is a good start to what we can do. The preliminary findings of the MARS Wave 1 study include reports on their health and cognitive ability as well as willingness to continue working as long as they possibly can. This is very encouraging indeed for the promotion of active and productive ageing.

I am confident that with such a rich database, the EPF will be able to continue developing relevant programmes and products catering to the sustainability of EPF members’ savings, as well as for the betterment of all Malaysians.

ALIZAKRI ALIAS
Employees Provident Fund
Chief EPF Officer
MESSAGE FROM UNIVERSITI MALAYA VICE-CHANCELLOR

Congratulations to Social Wellbeing Research Centre (SWRC) for its successful completion of Malaysia Ageing and Retirement Survey (MARS) Wave 1.

MARS is an enormous project aimed to generate an internationally comparable dataset on middle-aged and older persons on issues related to ageing and retirement which involved field survey throughout the urban and remote areas of Malaysia including Sabah and Sarawak. It is testimony of a successful collaboration between two great institutions of higher learning, the Universiti Malaya (UM) and The Regents of the University of Michigan, made possible through a Memorandum of Understanding (MOU) signed in March 2018. UM is represented by the SWRC, the Centre responsible for conducting MARS using Computer-Assisted Personal Interview (CAPI) while The Regents of the University of Michigan, represented by the Survey Research Center (SRC), the Center responsible for Health and Retirement Survey (HRS), USA which provided all the technical support and assistance in this venture. I am proud that UM is the pioneer among the public universities to have been involved in this large-scale project.

This MOU had opened doors to endless opportunities for more research and academic work from an international perspective as MARS is now on the world map being part of the Gateway to Global Aging, a platform for population survey data on ageing around the world. The link to the HRS was made possible through the centre’s collaboration with Professor Naohiro Ogawa and Professor Hideihiko Ichimura of the University of Tokyo, Japan. Besides HRS, other large scale studies include Survey on Health, Ageing and Retirement Europe (SHARE) involving more than 20 European countries, the Japanese Study of Aging and Retirement (JSTAR) and the Korean Longitudinal Study of Ageing (KLoSA). UM, in particular, SWRC, is privileged to be associated with these leading international research centres as we can learn much from sharing experiences on how different societies, cultures and policies prepare for their respective ageing population and future challenges.

MARS would not have materialized without the financial support from the Employees Provident Fund (EPF) given the high cost of funding the project. I would like to extend my sincere gratitude to EPF for believing in MARS and it is hoped that MARS’ rich database will be useful for EPF’s current and future planning and endeavors as it will be for SWRC and UM as well as researchers and policy makers. This, marks yet another milestone of a significant achievement of a strategic
partnership and synergy between UM and EPF following the successful launching of Belanjawan early last year. These two flagship projects are both meant to support the efforts of the government towards improving the wellbeing of individuals and families in this country.

What follows in this report is a snapshot of preliminary findings of MARS data on the respondents’ life experiences with respect to their personal and family relationships, various issues related to ageing and retirement as well as their outlook on life in general. Given the longitudinal nature of MARS UM can capitalise on this accumulation of rich and unique dataset that will allow researchers to study similarity and diversity of life histories of mid-aged and older adults across individuals, ethnicity, states, regions and other sub-groups and the changes that occur over time within Malaysia as well as across the international borders.

The dissemination of the findings through various platforms will certainly strengthen UM’s position as a leading institution of academic excellence. UM’s commitment goes beyond academic pursuit. MARS findings will identify vulnerable individuals and households which will enable us to design programs within our capacity and/or in partnerships with private organisations and NGOs to educate and promote their wellbeing and the communities they live in. MARS data will be useful to government ministries and agencies including the Ministry of Finance, Implementation and Coordination Unit (ICU), Ministry of Women, Family and Community Development, Department of Welfare, Ministry of Economic Affairs, Ministry of Health and State Religious Departments in strengthening their evidence-based policy making and service delivery. Given the importance of such study in providing input for formulation and implementation of effective policies to address the implications and emerging issues of ageing, it is with great hope that MARS will fulfil the much needed data for these purposes to protect and support our growing older population.

My heartfelt thanks to all individuals and organisations who have contributed directly and indirectly to the successful completion of MARS project.

PROFESSOR DATO’ DR. IR. MOHD. HAMDI ABD. SHUKOR
Vice-Chancellor
Universiti Malaya
ACKNOWLEDGEMENTS

The Social Wellbeing Research Centre (SWRC) would like to express its gratitude to the Employees Provident Fund (EPF) for funding MARS without which the project would not have materialised.

We would like to thank;

The Survey Research Center (SRC), University of Michigan for providing technical support and training.

The Department of Statistics Malaysia (DOSM) for selection of enumeration blocks and household samples.

The MARS respondents, thank you for believing in us and in participating in the survey.

To the field interviewers, thank you for your tireless efforts and dedication.

Last but not least to individuals and organisations that have directly or indirectly contributed to the success of MARS.
The True Measure of any Society can be Found in How it Treats its Weak and Vulnerable

Mahatma Gandhi
WHAT IS MARS?

Malaysia Ageing and Retirement Survey (MARS)

Is a major research undertaking by the Social Wellbeing Research Centre (SWRC) to produce nationwide longitudinal micro-level data relating to ageing and retirement involving personal interviews of individuals aged 40 years and older in Malaysia.

MARS collects information on vital issues impacting their lives which include personal (background characteristics, etc.), family (relationship with spouse, parents, children, siblings, transfers, etc.), health (health status, diagnosed illness, healthcare utilisation, physical measurement, etc.), economic (work, employment, retirement, income, etc.) and other social factors (friends, social participation, etc).

MARS data are to be harmonised with leading international research data so as to enable adoption of best practices and comparability of findings across participating countries around the world.

It is hoped that the rich potential of MARS data from such a longitudinal study will become a pivotal source of invaluable inputs in promoting research and development opportunities, and enhancing policy making for active and healthy ageing in Malaysia.

This report presents a snapshot of the findings on selected variables of interest based on the total sample and where applicable, across the subgroups of the sample, in particular age and sex. The calculation of certain categories may not always be the same between tables due to independent rounding. Percentages shown in the charts or graphics were computed from actual absolute figures and may not always add up exactly to 100 per cent because of the rounding method used.
CHAPTER ONE

INTRODUCTION

1.1 The World is Ageing
1.2 What about Malaysia?
1.3 The need for a longitudinal study
1.4 Initiation of MARS
1.5 Objective of MARS
1.6 Significance of MARS
1 Introduction

1.1 The World is Ageing

Population ageing is experienced by many developed and developing countries as indicated by the steady increase in the proportion of older people over the past decades. Within a span of 35 years the world’s population aged 60 years and older is projected to increase from 900 million in 2015 to 2 billion by 2050, with the increase in proportion almost doubling from 12 percent to 22 percent, respectively (World Health Organization (WHO), 2018). It is also estimated that by 2050, 80 percent of older persons will live in low- and middle-income countries.

In Asia and Pacific Region, about 12.4 percent of the population were 60 years and older in 2016 and projected to exceed 25 percent or to 1.3 billion people by 2050 while the proportion of the Asian population aged 65 years and older will be more than quadruple by 2050 (United Nations, 2016). Twenty-seven percent of the population of Japan are already 65 years or older and predicted to reach 32 percent by 2030, or one in three persons in Japan will be at least 65 years old. What is more alarming is the dramatic acceleration of ageing of the older population. Among those aged 60 years and older, the fastest growing population is that of the oldest-old, those in the 80 years and older bracket. The number of persons aged 80 years or older will increase threefold from 143 million in 2019 to 426 million in 2050 of which 120 million will live in China alone (United Nations, 2019).

The changing in demographic profile of the world, with ageing population on the increase, has led to many important social and economic implications. While there are variations in the structure and pace of ageing across regions and countries, the rising trend has posed challenges to not only the older persons themselves as they are becoming more dependent on the younger working age group, but also governments will have to withstand fiscal and political pressures due to the increasing demand for public systems of health care, pensions and social protection of older population. Certainly, there has been a growing interest and debate on various issues related to population ageing. On the one hand, it has been argued that population ageing has substantial capacity to diminish the productive capacities of national economies. While on the other hand, studies seemed to suggest that any negative effects on economic growth are likely to be no more than modest (Bloom, Canning, and Fink, 2010; Boersch-Supan and Ludwig, 2010). However, one common fact remains and that regardless of the effect on the economy as a whole, population ageing will lead to increase in need for elder care and support, at a time when, in developing countries and especially so in Asian societies, traditional family-based care which was once a common practice has been on the declining trend.

…”the rising trend has posed challenges to not only the older persons themselves as they are becoming more dependent on the younger working age group but also governments will have to withstand fiscal and political pressures…”
Population ageing is the result of declining fertility, mortality and increasing life expectancy which raises crucial issues concerning the wellbeing of older persons (Cherchye, Rock and Vermeulen, 2012). Wellbeing is defined as a subjective perception of quality of life or life experience identified as the global perception of life satisfaction, combined with the predominance of positive over negative effect in daily life (Watson, Clark and Tellegen, 1988; Kahneman et al., 1999. As such, wellbeing is a complex construct, measured as a dynamic process encompassing multiple indicators including income, living conditions, physical and mental health, and the dimensions of perceived social coherence, actualization, integration, acceptance and contribution (Hugo, 2011; Keyes, 1998; Prilleltensky, 2005; Huta and Waterman, 2014). As cited by Wang, Shieh and Wang (2004), measure of wellbeing is an important outcome measure in understanding the life experiences of older persons.

Perhaps nowhere in the world is this demographic transition as inevitable as in many parts of Asia, where unprecedented speed of population ageing is occurring at the same time as dramatic transformation in the social and economic spheres are taking place. In light of these rapid changes, there is a clear need to enhance our understanding of the experiences and life histories of older persons, how they will affect their well-being as well as long-standing societal and familial arrangements that have been a vital part of old age support in the region. While population ageing is a cause for celebration as more and more people are living a lot longer due to improvements in nutrition and health, societies have to be prepared for the demographic shift to ensure that the wellbeing of older persons are taken care of to ensure a more purposeful life in these extra years.

1.2 What about Malaysia?

Malaysia too is experiencing a change in demographic profile with a steady increase in the number and proportion of older population. The total population of Malaysia rose by 13.6% from 28.6 million in 2010 to 32.5 million in 2019 and projected to reach 37 million by 2030 and 41.5 million by 2040 (Department of Statistics Malaysia, 2020). Similarly, the population aged at least 60 years and those aged at least 65 years accounted for 10.0% and 6.5% of the country’s total population in 2018, respectively.

Malaysia joined the group of ageing population status in 2020 with 2.4 million people aged 65 and older, accounting for 7.5% of its total population. Estimates indicate that by 2040 the proportion of population aged 60 and older will double to 20% while those aged 65 years and older will increase to 14.5%. The number of the oldest old, those aged 80 years and older is projected to increase four-fold from 0.3 million people in 2017 to 1.4 million by 2040 (Department of Statistics Malaysia, 2018).

Life expectancy at birth for the total population increased from 72.3 years in 2000 to 74.4 years in 2012 and 75.0 years in 2018. Life expectancy at birth for males increased from 72.2 years in 2012 to 72.7 years in 2018 while for females, the increase was from 76.9 years in 2012 to 77.6 years in 2018. There is a slight increase in the gender gap from 4.7 years in 2012 to 4.9 years in 2018. Improvement in average life expectancy at age 65 has also been observed with 15 years for male and 17.2 years for female in 2018, an
increase of 0.5 years and 0.8 years from 2012, respectively (Department of Statistics Malaysia). This means that males aged 65 in 2018 are expected to live to 80.0 years, and for females to 82.2 years. Similar rising trend is projected for the oldest old women and men who turn 80 years in 2019 are expected to live for another 7.0 years and 6.1 years, respectively.

The current and expected future demographic realities warrant the country to address the short- and long-term considerations in facing major challenges to ensure sound and sustainable socio-economic, health and social care systems are ready for this demographic shift. While ageing is associated with biological changes and other life transitions such as a gradual decline in physical and mental capacity, susceptibility to diseases and ultimately death; a longer life brings with it opportunities for older people to continue to be active and contribute to their families and communities.

Currently there are three policies related to the wellbeing of older persons in Malaysia namely, National Health Policy for Older Persons 2008, the National Policy for Older Persons and Plan of Action for Older Persons 2011 and Physical Planning Guidelines for the Elderly 2013. While these policies provide the foundation for the welfare of older persons, not much attention is given to the promotion of active ageing. To date, Malaysia has yet to come out with its Active Ageing Index (AAI) which has been adopted and used by European countries as well as a few Asian countries including Japan, Korea and China to measure the untapped potential of older people for active ageing (Rantanen et al., 2019).

### 1.3 The need for a longitudinal study

Large scale longitudinal studies on crucial issues impacting the lives of middle aged and older persons have been conducted worldwide in recent decades, more so in developed nations. For example, the Health Retirement Survey (HRS) in the United States which began its First Wave 27 years ago in 1992 have been continuing with subsequent waves every two years. The Survey of Health, Ageing and Retirement Europe (SHARE) started in 2002 covering 27 countries in Europe and Israel. In Asia, China, Japan, Korea, India and Thailand have joined these leading international studies in embarking on similar longitudinal studies. The Korean Longitudinal Study of Ageing (KLoSA) started in 2006 followed by the Japanese Study of Aging and Retirement (JSTAR) in which its full-scale survey was carried out in January 2007. Both the China Health and Retirement Longitudinal Study (CHARLS) and the Health Ageing and Retirement Study in Thailand (HART) were launched in 2015 followed by the Longitudinal Ageing Study in India (LASI) in 2016.

While Malaysia is heading towards an older society and notwithstanding the increased recognition of the importance and relevance of issues related to population ageing, to date there has been no longitudinal study conducted nationally to explore and understand these issues. Recent empirical research on topics related to population ageing in Malaysia has been documented (Mansor, Tey and Yap, 2018). Earlier studies were mostly conducted in specific regions or locations with limited coverage in terms of the areas of concern. The National Health and Morbidity Study (NHMS), 2018 carried out by the Institute of Public Health, Ministry of Health Malaysia specifically focused on
elder health is a cross-sectional nationwide study. While the Malaysian Elders Longitudinal Research (MELoR) led by the Faculty of Medicine, Universiti Malaya is a multi-dimensional study, its coverage is limited to Kuala Lumpur and Klang Valley. Similar multi-dimensional study was conducted by Malaysian Research Institute on Ageing of the Universiti Putra Malaysia in 2017 on Retirement Preparedness and Productive Ageing among Government Employees and Retirees in Klang Valley.

Given the importance and the lack of availability of such data for formulation and implementation of effective mid and long-term policies to address the trends that emerge in the midst of population ageing, MARS was initiated to fill this gap through a large-scale, nationally representative, longitudinal survey on ageing, health and retirement. MARS aims to produce the data needed to understand the situation of Malaysia’s older population, formulate and implement policies that can protect and support the growing ageing community.

1.4 Initiation of MARS

The initiation of MARS began with a series of consultations involving local and international experts as well as key people of leading international research including HRS (Health and Retirement Survey, USA), SHARE (Survey of Health, Ageing and Retirement in Europe) and JSTAR (Japanese Study on Aging and Retirement). MARS benefited much from these studies in terms of advice and inputs, in particular, HRS in the development of MARS study design, training and technical support. This was made possible through an official Memorandum of Understanding between Survey Research Center, Regent of the University of Michigan and Social Wellbeing Research Centre of the Universiti Malaya in early 2018.

1.5 Objective of MARS

The main objective of MARS is to produce comprehensive micro-level data on various aspects of ageing and retirement impacting the lives of middle aged and older persons which will provide useful input for policy making and the formulation of a national framework for active and healthy ageing towards strengthening social protection system for the country.

Specific objectives of MARS:
- To produce a comprehensive baseline data on the individual, family, social, economic and health of middle aged and older persons;
- To collect longitudinal data on life histories and experiences of middle aged and older persons over time so as to gain a deeper understanding of the issues and challenges related to retirement and ageing;
- To offer evidence-based recommendations on opportunities and policies to address the trends that emerge in the midst of population ageing in Malaysia;
- To be part of the global platform on retirement and ageing research comparable with similar longitudinal studies that can provide the basis for policy making and academic studies.

1.6 Significance of MARS

MARS will be a national landmark in scientific research that will provide a much-needed foundation for a better understanding of ageing related issues in Malaysia and designing appropriate
evidence-based policies for adults and older people. Due to its harmonised design with parallel international studies, MARS can learn and gain much from the experiences of other participating countries. At the same time MARS will be able to contribute to scientific insights and policy development in those countries and be part of the conversation on how different societies, cultures and policies are preparing for their ageing population.

MARS is adapted from the HRS in the United States through collaboration between SWRC, Universiti Malaya, an EPF endowed centre, and the Survey Research Center (SRC), University of Michigan. SRC provides support in the development of MARS study design, training and technical assistance prior to, during and post-production of MARS data to ensure quality data as validated through regular monitoring of the fieldwork and random call backs. Over the years HRS has inspired many similar studies worldwide with more than 25 countries on four continents undertaking HRS-type research. Hence, there are endless opportunities for MARS to widen and deepen research on the nature, implications and emerging issues of ageing. While overall comparability with the HRS model was maintained, several changes were made to reflect the cultural, religious and lifestyles of the local context in Malaysia.

Another key attribute of this research is the longitudinal setup which allows data on the same individuals to be assembled over an extended period, enabling researchers to follow their life histories and experiences and examine occurring changes and trends while at the same time have access to current data.

Ageing is a continuous process. To understand that process and to track the movement of individuals through the various stages of life including employment, morbidity, disability and mortality requires longitudinal data. In this sense, MARS is Malaysia’s first ever globally comparable panel survey data of middle aged and older persons which will become a pivotal source for policy making on active and healthy ageing.

“MARS is Malaysia’s first ever globally comparable panel survey data of middle aged and older persons which will become a pivotal source for policy making on active and healthy ageing.”
CHAPTER TWO

STUDY DESIGN

2.1 Sample
2.2 Data collection
2.3 Questionnaire
2.4 Ethical considerations
2.5 Pilot study
2.6 Fieldwork
2.7 Data validation and quality control
2 Study Design

2.1 Sample

The baseline sample of MARS consists of individuals aged 40 years and older residing in all the states of Malaysia including Sabah and Sarawak. Selection of sample was done by the Department of Statistics Malaysia (DOSM) based on the 2010 Population and Housing Census (Figure 2.1). The geographical areas in Malaysia were divided into Enumeration Blocks (EBs). There was a total of about 75,000 EBs, each EB contains between 80 to 120 Living Quarters (LQs) with an average population of 500 to 600 people per LQ. The EBs were classified into either urban or rural areas.

To ensure widest coverage possible across the country, each state was first stratified by urban and rural EBs. A multi-stage sampling procedure was adopted beginning with the selection of EBs in each stratum followed by the selection of living quarters or households and members of the selected households. The number of EBs selected in each state was based on proportionate allocation to the population size of the state and systematic sampling was used in the selection of EBs. This means more EBs were allocated to states with larger population size such as Selangor, Johor and Sabah. Adopting the common practice, 10 to 12 households per EB were randomly selected to maintain heterogeneity of the sample representing the various subgroups of the population. Subsequently, DOSM provided a list of selected EBs and LQs with addresses, also called households which was then referred to as sample IDs (SIDs) (Table 2.1). For each SID, any member aged 40 or older who has lived in the household most of the time would be eligible to participate in the survey. Should there be more than one eligible member, a maximum of three oldest eligible members would be selected as possible respondents.

Figure 2.1: Map of Malaysia
Table 2.1: Distribution of EBs & SIDs by state

<table>
<thead>
<tr>
<th>State</th>
<th>EBs</th>
<th>SIDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johor</td>
<td>105</td>
<td>1240</td>
</tr>
<tr>
<td>Kedah</td>
<td>60</td>
<td>600</td>
</tr>
<tr>
<td>Kelantan</td>
<td>52</td>
<td>580</td>
</tr>
<tr>
<td>Melaka</td>
<td>26</td>
<td>290</td>
</tr>
<tr>
<td>Negeri Sembilan</td>
<td>31</td>
<td>310</td>
</tr>
<tr>
<td>Pahang</td>
<td>47</td>
<td>470</td>
</tr>
<tr>
<td>Perak</td>
<td>70</td>
<td>780</td>
</tr>
<tr>
<td>Pulau Pinang</td>
<td>48</td>
<td>480</td>
</tr>
<tr>
<td>Perlis</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>Selangor</td>
<td>178</td>
<td>1952</td>
</tr>
<tr>
<td>Terengganu</td>
<td>34</td>
<td>340</td>
</tr>
<tr>
<td>Sabah</td>
<td>107</td>
<td>1080</td>
</tr>
<tr>
<td>Sarawak</td>
<td>77</td>
<td>770</td>
</tr>
<tr>
<td>Federal Territories</td>
<td>58</td>
<td>580</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>900</strong></td>
<td><strong>9542</strong></td>
</tr>
</tbody>
</table>

2.2 Data collection

MARS data were collected through face-to-face interviews using Computer Assisted Personal Interviewing (CAPI) by trained field interviewers. The SIDs were released in batches to the field interviewers and letters were sent out a few weeks prior to the fieldwork to notify the SIDs of MARS project. Among other information, the letter introduces what MARS study is all about, how SIDs were selected and the importance of their participation to the overall purpose of the study. To conduct CAPI, field interviewers were equipped with laptops; pre-loaded with the survey questions, structured in such a way that only one question appears on the screen at a time and allows the interviewers to directly input the responses on to the same screen. Use of CAPI allows for efficient data entry, crosschecking of data in real time thereby minimizing data recording errors and ensuring internal consistency.

MARS CAPI uses a sample management system, called SurveyTrak, and survey processing tool, called Blaise, which were developed and programmed by the Technical Team of the Survey Research Center (SRC), University of Michigan. The software uses Malay and English for its language interface and questionnaire instrument. Hardcopy of MARS questionnaire in Mandarin and Tamil were also provided for Chinese and Indian speaking field interviewers. In addition to the data obtained on the subject matter, contact observation by the interviewers were collected on the attitudes and behaviours of the respondents towards the survey, household surrounding and the community they live in. Interviewers' experiences in the course of their field work were also recorded for purpose of para-data analysis and planning for future waves of the survey.

2.3 Questionnaire

To a large extent possible to enable comparability on the global platform, MARS survey instrument was developed, in consultation with principal investigators of JSTAR and HRS. Subsequently, MARS questionnaire was discussed among the research team members to ensure applicability, suitability and practicality in the local context. After much deliberation, MARS survey questions were completed for pilot test. Two rounds of pilot tests were conducted using both Paper Assisted Personal Interviewing (PAPI) and Computer Assisted Personal Interviewing (CAPI). MARS survey contains traditional questions and physical measurement. There are altogether 260 traditional questions covering five core components namely respondent and family members, health, work and employment, income and consumption, savings and assets as shown in Figure 2.2. Physical measurement was administered on site during the field interview based on standard protocols and procedures. The measurement taken from participating respondents includes height, weight, waist and hip circumference, blood pressure and grip strength.
MARS CAPI survey questionnaire is divided into the following sections:

Section A: Background Information of the Respondent
- Birth information, age, sex
- Ethnicity, religion, marital status, education
- Native language, spoken and written language

Section B: Family Support and Transfer
1) Living children including stepchildren and adopted children:
   - Personal details of children
   - Living arrangement of children
   - Contact with children
   - Support received from and given to children
2) Living parents and/or parents-in-law:
   - Personal details of parents and/or parents-in-law
   - Living arrangement of parents and/or parents-in-law
   - Contact with parents and/or parents-in-law
   - Support received from and given to parents and/or parents-in-law
3) Living siblings including step siblings and adopted siblings:
   - Personal details of siblings
   - Living arrangement of siblings
   - Contact with siblings
   - Support received from and given to siblings

Section C: Health
1) Health Status:
   - Overall health status
   - Pains and aches
   - Doctor-diagnosed diseases
   - Accidents, falls
   - Eyesight, hearing, oral health
2) Risk Factors:
   - Smoking
   - Alcohol consumption
3) Psychosocial:
   - Attitudes and perception about life
   - Spouse relationship
   - Social, cultural and religious activities
4) Physical Activities:
   - Participation in vigorous, moderate and light physical activities
   - Activities of Daily Living (ADL)
• Instrumental Activities of Daily Living (IADL)

5) Cognition:
• Memory testing
• Counting and simple arithmetic
• General knowledge

6) Healthcare Utilisation:
• Medical examination
• Hospitalisation
• Health insurance

7) Physical measurement:
• Height, weight, waist & hip circumference
• Blood pressure
• Grip strength

Section D: Work, Employment & Retirement
• Work status, occupation, industry
• Aspects of current job/employment
• Retirement decision

Section E: Income and Expenditure
• Sources of income
• Monthly expenditure

Section F: Savings and Assets
• Savings
• House ownership
• Assets

2.4 Ethical considerations

Ethics approval was obtained from the University of Malaya Research Ethics Committee (UMREC) (Reference No: UM.TNC2/UMREC – 341). Both verbal and written consent were obtained from respondents during the field interview.

2.5 Pilot study

Two pilot tests of MARS questionnaire were carried out. The first pilot of the final draft questionnaire was conducted in selected areas in and around Selangor using PAPI. The revised MARS questionnaire was subsequently tested in selected EBs in Selangor and Perak using Computer Assisted Personal Interviewing (CAPI).

2.6 Fieldwork

The field interview was carried out in July 2018 to July 2019 involving 150 trained enumerators. The first training attended by about 100 participants was conducted by SWRC in July 2018 with assistance from technical experts from the Survey Research Center (SRC), University of Michigan. Subsequent trainings were conducted in batches involving a smaller number of participants per training. On-site coaching was also done to assist enumerators needing help in conducting the interviews.

Most of the interviewers employed were fluent in at least two languages, Malay and English. There were also Chinese speaking and Tamil speaking interviewers to address Chinese and Tamil speaking SIDs. Native speakers of local dialects of Sabah and Sarawak were recruited to conduct the survey in East Malaysia. About 84 percent of completed interviews were conducted in Malay, 7 percent in English, and about less than 5 percent in Mandarin or other Chinese dialects with the remaining balance in Tamil and other dialects. On average, 4.8 attempts were needed to obtain one completed interview for SIDs located in urban areas and more attempts were required for areas beyond its vicinity.

2.7 Data validation and quality control

To ensure quality data were being collected, the team regularly monitored the field progress of interviewers using paradata. Interviewer behaviours were observed in terms of the length of
interview, number of questions asked, number of negative or ‘don’t know’ responses. For example, interviewers who displayed tendency for short interview length and high negative response were closely monitored so that early intervention can be done.

In addition, 10 percent of completed interviews were verified through call backs. These cases were selected on the basis of: (i) initial completed interview, (ii) random completed interview and (iii) paradata completed interview. The first two selections were based on the overall interview order by field interviewers while the last selection was made based on field interviewers that displayed worrying or suspicious behaviour through their paradata.

Call backs for verification were done through phone interviews where the respondents were asked questions to verify the time and length of interview, location, background information, physical measurement and cash incentive received. Questions that were not captured during the actual interview were included to ascertain interviewer behaviour. For example, respondents were asked whether the interviews were conducted separately if there were multiple respondents. Respondents were also asked whether they have any comments regarding the field interviewer or the study itself.
CHAPTER THREE

MARS RESPONDENTS

3.1 Background
3.2 Profile of respondents
3.3 Living arrangement
3.4 Family relationship
3.5 Family support
3 MARS Respondents

3.1 Background

The questions that are captured include demographic information such as sex, age, ethnicity, place of residence, marital status, education, religion, and other information in the context of the respondent’s life. Such data are important for the examination of certain variables which include education, employment, health and psychological wellbeing across the subgroups of the sample. For example, educational attainment has been widely shown to have a significant influence on employment, income, health and mortality (Zajacova et al and Lawrence, 2018; Hahn and Truman, 2015; Almond et al, 2007). Literature also shows that marital status may play an important role in older adults’ health status and behaviours, social relationships and quality of life (Gutiérrez-Vega, Esparza-Del Villar, Carrillo-Saucedo, and Montañez-Alvarado, 2018; Rook and Zettel, 2005; Schone and Weinick,1998). Ethnicity is another important variable to be included in socio-economic research in the context of multi-ethnic Malaysia (Khan et al., 2017; Tey et al., 2016).

Demographic information which includes sex, age and relationship to the respondent were obtained on each household member residing with the respondent. In addition, information on demographic and socioeconomic characteristics of the respondent’s living parents, children and siblings as well as his/her contact with them were gathered. Parents, children and siblings defined in MARS include biological, foster, step and adopted parents, children and siblings, respectively.

What follows is a snapshot of the findings on selected variables of interest based on the total sample and where applicable, across the subgroups of the sample, in particular age and sex.

3.2 Profile of respondents

A total of 5,613 respondents participated in the survey. The distribution by sex, age, location, and education level is shown in Table 3.1. Female constitutes about 56%, respondents aged 40-59 about 60% while 14% are those aged 70 and older.

Majority of respondents are from the urban areas (61.6%) and have at least lower secondary education (51.7%) while 12% of them have no schooling experience.

<table>
<thead>
<tr>
<th>Details</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (n=5613)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2481</td>
<td>44.2</td>
</tr>
<tr>
<td>Female</td>
<td>3132</td>
<td>55.8</td>
</tr>
<tr>
<td>Age group (n=5613)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td>1555</td>
<td>27.7</td>
</tr>
<tr>
<td>50-59</td>
<td>1827</td>
<td>32.5</td>
</tr>
<tr>
<td>60-69</td>
<td>1443</td>
<td>25.7</td>
</tr>
<tr>
<td>70-79</td>
<td>621</td>
<td>11.1</td>
</tr>
<tr>
<td>80+</td>
<td>167</td>
<td>3.0</td>
</tr>
<tr>
<td>Strata (n=5613)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>3455</td>
<td>61.6</td>
</tr>
<tr>
<td>Rural</td>
<td>2158</td>
<td>38.4</td>
</tr>
<tr>
<td>Education Level (n=5612)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling</td>
<td>674</td>
<td>12.0</td>
</tr>
<tr>
<td>Primary school</td>
<td>1652</td>
<td>29.4</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>1184</td>
<td>21.1</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>1449</td>
<td>25.8</td>
</tr>
<tr>
<td>Pre-U/Diploma/Form 6/Voc.</td>
<td>385</td>
<td>6.9</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>268</td>
<td>4.8</td>
</tr>
</tbody>
</table>
Malay accounts for 55.8% followed by Other Bumiputera (22.2%), Chinese (11.1%) and Indian (8.1%) (Figure 3.1). Other Bumiputera are mainly respondents from the states of Sabah and Sarawak. The ‘Other’ category includes respondents of mixed parentage and those with permanent residence status.

**Figure 3.1:** Respondents by ethnicity

Muslim comprises of 70.5% followed by Christian (11.8%), Buddhist (9.6%) and Hindu (6.5%). ‘Others’ religion includes atheist and believers of other faiths.

**Figure 3.2:** Respondents by religious faith

Slightly more than three quarters of the total sample are married (77.6%) while widowed, divorced, or separated comprise of 18.4% and 4.0% of the respondents are never married.

**Figure 3.3:** Respondents by marital status

Proportion of married respondents decreases from 85.3% among those aged 40-49 to 67.1% among those aged 60 and older.

As expected, respondents who are widowed or divorced/separated increase with age. Three out of 10 respondents aged 60 and older are either widowed, divorced, or separated.

**Figure 3.4:** Respondents by marital status and age
Overall, the average family size is three members per household. A high proportion of respondents (84.2%) live with their family members, majority with unmarried children. The proportion of respondents reported living with their parents is about 11.6%. Similar proportion is reported to be living with their spouses only while those living alone constitute about 4.2%, majority being female aged 60 and older. The data show that 20.3% of respondents live in multigenerational household consisting of possible combinations of respondents with parents, grandparents, children or grandchildren.

### Figure 3.5: Respondents aged 60 and older by marital status and sex

**3.3 Living arrangement**

One of the measures of informal and formal support between the different generations of a family is co-residence which is captured by the question on living arrangement. The living arrangement of respondents would provide useful information for detection of vulnerable groups for possible intervention. Bongaarts and Zimmer (2002) examined living arrangements of older adults across 43 developing countries and found that co-residence with adult children is most common in Asia and that is more frequent with sons than with daughters. Studies have also shown that living arrangement of older adults is associated with their health status, wellbeing, life satisfaction and social support (Zhang, 2015; Teh, Tey, and Ng, 2014; Kooshiar et al., 2012).
Figure 3.7 shows the different proportions of members living with respondents as indicated by the size of each box. Respondents living with sons including step and adopted sons constitute the highest proportion, followed by daughters including step and adopted daughters and their spouses and grandchildren.

Across age groups, the proportion of respondents living with family members ranges from 71.0% among those aged 70-79 to 93.1% among those aged 40-49 (Figure 3.8). Younger respondents may have young school-going children living with them while respondents in the oldest age group, 80 and older, live with family members as many may not be able to live independently.

Figure 3.7: Distribution of members living in the same household

Figure 3.8: Respondents by living arrangement and age

Among respondents aged 60 and older, the proportion of male respondents living with spouses only is substantially higher than female respondents while the opposite is true for those residing with other family members and those who are living alone (Figure 3.9).
3.4 Family relationship

In most cases, the relationship between older parents and their adult children remain intact over the life course through co-residence, contact, care, support and assistance that are exchanged between them. These exchanges provide the foundation of sustainable bonding and reciprocal obligation, an important element in times of need especially so in the context of the wellbeing of older adults in later years (Kyungmin, Zarit, Cheng & Fingerman, 2015; Aziz & Yusooff, 2012; Silverstein & Giarrusso, 2010; Swartz, 2009; Antonucci, Langfahl, & Akiyama, 2004; Davey, Janke, & Savla, 2004). For example, Aziz & Yusooff (2012) stressed the importance of family and kinship network in strengthening intergenerational relationships.

About 95% of respondents reported meeting in person at least once with any of their children with 93% of them reported communicating at least once with any of their children in the past 1-year. Mode of communication includes phone calls, WhatsApp, SMS, email and virtual meeting (Figure 3.10).
Approximately 47% of respondents have at least one living parent. Of the total living parents, 68.5% are women (Figure 3.11). About 81.4% of respondents reported meeting in person at least once with any of their parent(s) with 75.7% of them reported communicating at least once with any of their parents in the past 1-year (Figure 3.12).

### 3.5 Family support

MARS provides the data needed to understand family and household structures, and intergenerational transfers. The questionnaire includes both the financial and non-financial support to and from children as well as support to and from parents.

Grundy and Henretta (2006) found that about one-third of women aged 55-69 in England and in the United States reported providing support to ascending and descending generations simultaneously. In Europe, intergenerational financial transfers are mainly from parents to children (Scodellaro, Khlat & Jusot 2012; Fritzell & Lennartsson, 2005) while the opposite is true in many Asian countries (Wu et al., 2018; Lee, Lyu, Lee & Burr, 2014; Agree, Biddlecom, Chang, Perez, 2002). Studies have also shown the impact of intergenerational transfers on older adults’ health, economic and psychological wellbeing, as well as life satisfaction (Wu et al., 2018; Diaz-Venegas, Sáenz, & Wong, 2017; Ng & Hamid, 2013). For example, Wu et al. (2018) reported the inverse relationship between financial transfers from children and depressive symptoms among mid-aged and older Chinese in China. Similarly, Ng and Hamid (2013) found that older Malaysians who are involved in providing and receiving support to/from children have significantly higher life satisfaction than their counterparts.

Overall, respondents reported that they both received from and gave financial and non-financial support to their children. The proportion of respondents giving support to their children is higher than those who received support from their children (70.1% and 69.7% respectively). However, respondents who received financial support from their children is higher than (57.0%) those who gave financial support to their children (50.9%) (Figure 3.13).
Of the respondents who received financial support from their children, 85.0% of them reported receiving on a monthly basis with a median amount of RM150. Similarly, majority of the respondents who gave financial support to their children do so on a monthly basis (87.1%) with a median amount of RM100.

In terms of the amount, the data indicate 50% of the respondents received from their children a total amount of at least RM3,000 in the past year while 50% of them gave a total amount at least RM3,000 to their children (Figure 3.14).

Further examination of the financial support received from and given to children, Figure 3.15 shows that while there are fluctuations, the amount of financial support received increases with age and the opposite is true of the amount of financial support given to children. The difference between the amount received and the amount given is negative from age 40 up to age 54 and increases from age 55 onwards (Figure 3.15).
Figure 3.16 shows generally that women received a slightly higher median amount from their children compared to men across all ages except at age 41 and 44.

![Figure 3.16: Median amount received from children in the past 1-year](Photo by Izuddin Helmi Adnan at Unsplash)

Similar pattern can be observed in the financial support given to children, where the trend indicates that men gave a slightly higher median amount to their children compared to women across all ages.

![Figure 3.17: Median amount given to children in the past 1-year](Photo by Izuddin Helmi Adnan at Unsplash)
CHAPTER FOUR

EMPLOYMENT

4.1 Working status
4.2 Retirement plan
4 Employment

4.1 Working status

One major concern of ageing is the fact that there will be older individuals who are out of employment. This will affect their economic wellbeing, especially when they do not have enough retirement savings and becoming more dependent on the family (Lai & Camea, 2012; Mansor & Abd Samad, 2013; Alaudin, Ismail & Isa, 2016).

MARS collects information on employment, work history and characteristics, retirement planning and life in retirement.

Overall, 38.9% of respondents are still working. ‘Working’ comprises of those who are involved in any economic activity, while those who are not working include homemakers, retirees, disabled, unemployed and temporarily not working. Expectedly, the proportion of those who are still working decreases with age from 60.1% among those aged 40-49 to 3.1% among those aged 80 and older (Figure 4.1).

From Figure 4.2, the proportion of respondents working is higher among men than women. Majority of women who are not working are homemakers. Further analysis of respondents who are working by age and sex, Figure 4.3 shows that the proportion of working men is consistently more than double compared to women across all age group. For both men and women, the proportion of those working decreases with age with a sharp drop among men aged 60 and older.

Figure 4.4 shows the different proportions of respondents who are not working as indicated by the size of each box. ‘Not Working’ comprises of those who are homemakers, retirees, disabled, unemployed and temporarily unemployed. Among those who are still working, majority of them work in agricultural sector (22.9%) followed by elementary occupation (18.7%), service and sales worker (15.3%), craft and trades worker (9%), clerical support worker (8.6%), professionals (8.0%), manager (6.9%), technical professionals (5.4%), plant operator (4.8%) and armed forces (0.3%). Data indicate that a high proportion of respondents are in low paying jobs (Figure 4.5).
4.2 Retirement plan

Overall, more than 82.0% of respondents want to continue to work if they are able to. The proportion of respondents who will continue to work ranges from 88.4% among those aged 40-49 to 50.3% among those aged 80 and older (Figure 4.6).

Among those who are still working, respondents were asked about their retirement plans as shown in Figure 4.7. Slightly more than a quarter reported they will work for as long as their health permits. About 19.9% have not given much thought about retirement while about 18.2% plan to stop working altogether upon retirement.
Figure 4.7: Respondents’ retirement plan
CHAPTER FIVE

INCOME AND EXPENDITURE

5.1 Income
5.2 Expenditure
5 Income and Expenditure

5.1 Income

Generally, older people are less likely to have paid employment and obviously more vulnerable than younger adults because they are more likely to have health issues and the need for health care. Income of older people are mostly generated from a combination of their own savings which are often small and with low interest yield, formal pension schemes and support from family members. Capacities and resources will be more limited, and their needs will be more complex as they get older.

Information on income for MARS respondents collected includes sources and amount of income. Income entails salary and wages, profit from business, rental, dividend from investment, private transfers and financial assistance from government and other agencies.

In this section, respondents were asked about income they received in a year excluding income given by other household members (private transfer). Figure 5.1 shows that 60% of respondents received annual income excluding private transfer in the past year.

Figure 5.2 shows that proportion of male respondents who received annual income (excluding private transfer) is substantially higher compared to female respondents (74.8% and 48.4%, respectively).

Figure 5.2: Proportion of respondents receiving annual income by sex

Figure 5.3 indicates that the proportion of respondents receiving annual income (excluding private transfer) decreases gradually from 62% among those aged 40-49 to 57.8% among those aged 70 and older.

Figure 5.3: Proportion of respondents receiving annual income by age

Subsequently, respondents were probed on their source(s) of income received in the past one year. The top 3 sources of income received are Salary/Rental (55.5%) followed by Cost of Living Allowance (40.4%) and Pension /SOCSO/ LTAT (17.2%) (Figure 5.4).
Figure 5.4: Sources of income (multiple answers)

<table>
<thead>
<tr>
<th>Source of Income</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary/Rental</td>
<td>55.5</td>
<td></td>
</tr>
<tr>
<td>Cost of Living Allowance/Subsidies</td>
<td>40.4</td>
<td></td>
</tr>
<tr>
<td>Pension/SOCSO/LTAT</td>
<td>17.2</td>
<td></td>
</tr>
<tr>
<td>Social Welfare Department (Elderly/Disability aid)/Zakat/Donation received</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>Social Welfare Department (Elderly/Disability aid)/Zakat/Donation received</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.5 shows that the proportion of respondents who received annual income from Salary, Pension/SOCSO/LTAT and Insurance/Dividend is slightly higher among males compared to females.

The distribution of the sources of income by age is shown in Figure 5.6. The proportion of respondents receiving salary declines from 77.8% among those aged 40-49 to 26.7% among those aged 70 and older.

The proportion of respondents who received cost of living allowance/subsidies increases from 34.5% among those aged 40-49 to 50% among those aged 70 and older. A similar increasing trend is observed for respondents who received pension/SOCSO/LTAT, from 4.0% to 32.2%.
In terms of monthly net income received including private transfer, it is observed that 43.9% of respondents received less than RM1000. While less than 10% of the respondents received monthly net income of at least RM3000, while 19% of respondents are without income. However, it should be noted that some did receive a small amount of irregular income (Figure 5.7).

The proportions of female respondents who reported no/irregular income and income of less than RM1000 are higher compared to male respondents. For income of at least RM1000 per month, male respondents reported a higher proportion than female respondents (Figure 5.8).
5.2 Expenditure

Average monthly expenditure on household needs which include transportation, utilities, groceries, hygiene and personal care was obtained. These expenditures exclude any payment involving long-term rental or instalment. Respondents were also asked how they manage their monthly expenditure.

Respondents were asked to indicate their average monthly expenditure for typical household needs. Overall, respondents spend an average of RM800 and a median of RM583 for their monthly household expenditure.

Table 5.1 shows about 70.3% of respondents spend less than RM1,000 monthly. There is a small proportion of respondents who spend more than RM3,000 for their monthly expenditures.

Table 5.2 shows the average monthly expenditures on different household needs. The top 3 expenses are for groceries (RM393), transportation (RM177) and personal care (RM89).

<table>
<thead>
<tr>
<th>Table 5.1: Household expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total monthly expenditure</strong></td>
</tr>
<tr>
<td>&gt;RM 0 to RM 499</td>
</tr>
<tr>
<td>RM 500 to RM 999</td>
</tr>
<tr>
<td>RM 1,000 to RM 1,499</td>
</tr>
<tr>
<td>RM 1,500 to RM 1,999</td>
</tr>
<tr>
<td>RM 2,000 to RM 2,499</td>
</tr>
<tr>
<td>RM 2,500 to RM 2,999</td>
</tr>
<tr>
<td>≥ RM3,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Table 5.2: Mean household expenditure

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean amount (RM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groceries</td>
<td>393.1</td>
</tr>
<tr>
<td>Transportation</td>
<td>176.6</td>
</tr>
<tr>
<td>Personal care</td>
<td>88.7</td>
</tr>
<tr>
<td>Electricity</td>
<td>85.9</td>
</tr>
</tbody>
</table>

About 38% of respondents manage household finances by themselves. While 29.7% of respondents reported that they jointly manage with their spouses, 11.9% of them have their finances managed by other family members, mostly their children (Figure 5.9).

Respondents were asked to rate how they have been managing their household finances. About 45.3% of them reported they can manage well. While about 13.6% of respondents said they are poor in managing their household finances (Figure 5.10).

Figure 5.11 shows there is little difference in the proportion of respondents who rated poorly in their management of monthly
household finances between male and female. However, slightly more males than females rated themselves as being able to manage their household finances well.

The proportion of respondents who have been managing their household finances well gradually decreases from 48.4% among those aged 40-49 to 36.6% among those aged 70 and older (figure 5.12).

![Figure 5.11: Self-rated management of household finances by sex](image)

![Figure 5.12: Managing monthly household finances by age](image)
SAVINGS AND ASSETS
6.1 Savings / investments
6.2 Types of savings / investments
6.3 Assets
6.4 Types of assets
6 Savings and Assets

6.1 Savings / Investments

With longer life expectancy, retirement planning becomes a critical concern among the older population. In a study conducted by Randstad Workmonitor in 2015, 76% of employees in Malaysia believed they would have to work beyond their retirement age and that Malaysian employees plan far less for retirement. Only one in 10 employees was willing to save 40% of their income for old age while 90% of the respondents were willing to set aside only 20% or less.

A study by SWRC (2018) found that while majority of respondents aged 40 years and older residing in Malaysia would like to live at least 80 years, many did not save specifically for old age. This suggests that majority of Malaysians are not sufficiently ready and are lacking in knowledge on retirement planning (Shanmugan & Zainal Abidin, 2013).

On the question of savings/investments, 50% of the respondents reported having some savings/investment. Figure 6.1 shows that the proportion of male respondents having savings/investment is slightly higher compared to female respondents. This is consistent with earlier studies that show significant gender difference in terms of income, positive net flow and positive net worth (Gikonyo, Masud & Haron, 2012; Hamid, Masud & Chai, 2004).

Figure 6.2 indicates that highest proportion (52.4%) of respondents having savings/investments is observed among those aged 50-59 with the lowest proportion among those aged 70 and older (44.3%).
6.1 Types of Savings/Investment

The different types of savings/investments that respondents might have are shown in Figure 6.3. Overall, bank savings registered the highest percentage at 54.9% followed by Tabung Haji (38.2%), EPF Savings (28.9%) and ASNB/Unit Trust (25.9%). The proportion of male respondents having bank savings is slightly higher compared to female respondents (57% and 54.1% respectively) (Figure 6.4).

Similar trend is observed for respondents having EPF savings. However, more females have savings in Tabung Haji compared to male respondents. It can be observed from Figure 6.5 that the proportion of respondents having bank savings increases from 50.7% among those aged 40-49 to 67.8% among those aged 70 and older. In contrast, the proportion of those with EPF savings and ASNB/Unit Trust decreases with age (Figure 6.5).
Subsequently, total savings was obtained by adding up all the respondents’ savings in various sources. The median amount of total savings is RM10,250 (Figure 6.6). This indicates that 50% of respondents have total savings of less than RM10,000. There is no notable difference between the median of total savings amount among male and female respondents (Figure 6.7).

![Figure 6.6: Total savings amount (RM)](image)

![Figure 6.7: Total savings amount (RM) by sex](image)

6.2 Assets

In terms of assets 52.4% of the total sample reported that they own assets. The proportion of male respondents having assets is much higher (62.3%) than female respondents (44.6%) as indicated in Figure 6.8.

![Figure 6.8: Respondents having assets by sex](image)

There is not much variation in the proportion of respondents having assets across age groups (Figure 6.9).

![Figure 6.9: Respondents having assets by age](image)

6.3 Types of Assets

Among those who own assets, the types of assets owned are shown in Figure 6.10. The highest proportion of asset owned is house (82.6%) followed by land (49.5%).
The data also indicate that 43.3% of respondents reported that they own at least one house (Figure 6.11). There is no notable gender difference in asset ownership except for house ownership. The proportion of male house owners is slightly higher than female (86.7% and 78% respectively) (Figure 6.12). A similar trend is observed for the distribution for types of asset owned across age (Figure 6.13).
Data indicates that 50% of the respondents owned assets valued at less than RM165,000 (Figure 6.10). Fifty percent of male respondents have assets worth less than RM180,000 while 50% of female respondents have assets worth less than RM160,000 (Figure 6.11).

Figure 6.14: Total assets value (RM)

Figure 6.15: Total assets value (RM) by sex
CHAPTER SEVEN

HEALTH
7.1 Self-rated health
7.2 Body pains or aches
7.3 Doctor-diagnosed diseases
7.4 Accidents and falls
7.5 Grip strength
7.6 Blood pressure
7.7 Body Mass Index (BMI)
7.8 Abdominal obesity
7 Health

7.1 Self-rated health

Increasing longevity does not mean having an extended period of good health. Ageing is often associated with a gradual decline in physical and mental capacities and health. It is also associated with the onset of chronic diseases including hypertension, high cholesterol, diabetes, Alzheimer’s and arthritis (Steptoe et al., 2015). Various aspects of health are included in MARS questionnaire namely self-rated health, illnesses, treatment and hospitalisation as well as physical measurement.

Self-rated health could reflect on various elements, such as access to healthcare facilities and quality of healthcare. In a study by Bartsokas et al. (2019), people who self-reported better health revealed that they have high satisfaction with access to healthcare, compared to those who self-rated poor health (Bartsokas et al., 2019).

Overall, slightly more than 50% of the respondents reported that they are in good health (Figure 7.1). Figure 7.2 shows that the proportion of respondents who reported to be in good health is slightly higher among male than female. Similar proportion between male and female (≈12%) is observed for those in poor health.

The proportion of respondents with good health declines from 67.4% among those aged 40-49 to 30.3% among those aged 80 and older. Proportions of respondents with poor health increases from 5.4% among those aged 40-49 to 29.1% among those aged 80 and older (Figure 7.3).
Pain is a major public health concern in an ageing population as it is often a central component in any chronic condition. It is associated with adverse health consequences and poor quality of life. Studies have reported of increasing prevalence of pain with advancing age and that pain management among older persons has become a challenge for physicians of all specialties (Rottenberg et al., 2015).

MARS questionnaire asked whether respondents experienced any pain that limit their daily activities in the past one month. Overall, 76% of respondents reported experiencing body pains. Top 5 body pains or aches include knee pain (13.9%), leg (11.7%), back (8.7%), shoulder (7.1%) and headache (5.5%). It is observed that the pains experienced by the respondents are related to muscle movements (Figure 7.4).
7.3 Doctor-diagnosed diseases

The prevalence of non-communicable diseases (NCDs), such as hypertension, diabetes and high cholesterol are on the rise, particularly in the Asia Pacific region (Low et al., 2015). Data from National Health and Morbidity Study (NHMS III, 2016) indicated that prevalence of hypertension as measured among adults aged 60 and older was 74% with women having a higher proportion than men (77.4% and 70.1%, respectively) and that 49.3% were aware of their hypertensive status (Ho et al., 2013). Recent NHMS 2018 findings show that 27.7% of the respondents aged 60 and older were diagnosed by their doctors that they have diabetes, 51.1% hypertension and 41.8% high cholesterol (The Star Online, 23 August 2019).

For MARS, when asked whether respondents have been diagnosed of any diseases, 42.5% reported of never been diagnosed of any diseases. Among those who have been diagnosed, the top 5 diseases include hypertension (36.6%), high cholesterol (21.0%), diabetes (19.3%), heart diseases (5.1%) and asthma (4.3%) (Figure 7.5).

Further analysis of the respondents having been diagnosed with hypertension, high cholesterol and diabetes, Figure 7.6 shows that 9.1% of them have high cholesterol only, 31.7% have hypertension only and 9.3% have diabetes only. About 17.7% of respondents have both hypertension and high cholesterol while 13.5% have both diabetes and hypertension. Nearly 2.7% have both high cholesterol and diabetes. However, respondents with all three metabolic diseases constitute 16.0% of the total sample.

**Figure 7.5:** Proportion of respondents with doctor-diagnosed diseases

**Figure 7.6:** Respondents diagnosed with hypertension, high cholesterol and diabetes.
Across age groups, the top 3 diseases are hypertension, high cholesterol and diabetes. Proportion of respondents diagnosed with hypertension ranges from 48.2% among those aged 40-49 and increases to 57.6% among those aged 80 and older. The proportion of respondents diagnosed with high cholesterol gradually increases from 26.4% among those aged 40-49 to 29.2% among those aged 50-59 then decreases slightly from then on to 25.3% among respondents aged 80 and older. The proportion of respondents diagnosed with diabetes increases from 23.9% among those aged 40-49 to 26.0% among those aged 60-69 then decreases to 24.9% among those aged 70-79 with a further decline to 17.1% among the oldest age group (Figure 7.7).

MARS respondents were asked whether they were involved in any accidents or falls that affected their physical health in the past two years. Eighty nine percent reported that they did not experience any accidents or falls. 6.4% of respondents reported to have experienced falls, 3.2% were involved in automobile accidents and 1.8% were hit by a falling object and other form of accidents (Figure 7.8).

7.5 Grip strength

Generally, people will experience loss of hand grip strength as they age. Hand grip strength is measured because of its association with functional ability, premature mortality, disability and other health complications among older persons (Moy, Darus & Hairi, 2015; Nurul Shahida M.S., Sit Zawiah M.D. & Case K., 2015; Moy, Chang, & Kee, 2011). In many epidemiological studies, reduced muscle strength was found to be associated with increased risk of mortality (Bohannon, 2015, Ekstrand et al., 2016).

Grip strength for MARS respondents was measured for both dominant and non-dominant hands using a hand dynamometer. On average, the dominant hand grip strength is slightly higher than that of the non-dominant (Table 7.1).
Table 7.1: Distribution of grip strength

<table>
<thead>
<tr>
<th>Grip Strength</th>
<th>Kg (Mean ± SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant hand</td>
<td>22.8 ± 13.9</td>
</tr>
<tr>
<td>Non-dominant hand</td>
<td>21.1 ± 10.1</td>
</tr>
</tbody>
</table>

The average grip strength decreases with age from 25.8 kg among respondents aged 40-49 to 13.5 kg among respondents aged 80 and older for the dominant hand. Similar decreasing trend is observed for the non-dominant hand where the average grip strength among respondents 80 and older is half of that of the respondents aged 40-49 (Figure 7.9).

![Figure 7.9: Grip strength by age](image)

7.6 Blood pressure

Hypertension is associated with many age-related illnesses, such as coronary heart disease, peripheral vascular disease, stroke, cognitive impairment as well as renal and visual impairment (Dregan et al., 2016). It has been shown that prevalence of hypertension increases with age (Murphy et al., 2016). Monitoring hypertension epidemiology is pivotal in combating the burden of hypertension (Murphy et al., 2016).

Blood pressure was measured for all MARS respondents using a digital blood pressure monitor. The measured reading was then classified as optimal, normal, pre-hypertensive and hypertensive state, based on the 2018 Clinical Practice Guidelines, Management of Hypertension (5th edition), Ministry of Health, Malaysia.

Males have higher percentage of hypertension (52.5%), compared to females (49.2%) while similar proportions are observed for those in the pre-hypertensive category (20%) (Figure 7.11).

![Figure 7.11: Blood pressure category by sex](image)
Overall, about 51% had their blood pressure measurement in the hypertensive category (Figure 7.12). The highest percentage of respondents classified as having hypertension is among those aged 60-69 (56.3%). Between 16-22% of the respondents are classified as having pre-hypertension.

The prevalence of hypertension was compared between doctor-diagnosed hypertension and the measured blood pressure taken during the fieldwork. Figure 7.13 shows that the proportion of respondents screened during fieldwork as having hypertension (50.7%) is much higher than doctor-diagnosed hypertension (36.5%).

Among respondents who were not doctor-diagnosed with hypertension, 44.3% was found to have high blood pressure measurement, indicating that they are prone to have undiagnosed hypertension.

7.7 Body Mass Index (BMI)

Obesity has always been a major public health problem and it has also been associated with various adverse health outcomes, such as coronary heart disease, diabetes and dementia (Hobbs et al., 2019, Garfield et al., 2016). Early recognition and prevention of increasing body weight would aid in population-based prevention against obesity. In this study, we measured the body mass index (BMI) using the formula:

\[ \text{BMI} = \frac{\text{Weight (kg)}}{\text{Height}^2 \text{ (m)}} \]

Based on the Clinical Practice Guidelines on Management of Obesity 2004, Ministry of Health, Malaysia, respondents were grouped into 4 categories, namely, underweight, normal weight, pre-obese and obese. Overall, 37.9% and 38% of respondents are obese and overweight, respectively. The prevalence of obesity declined by two-fold from 42.7% among respondents in the age group 40-49 to 22.5% among those in the age group 80 and older (Figure 7.14). Prevalence of obesity among females is higher (43.1%) compared to male (31.3%) (Figure 7.15).
7.8 Abdominal obesity

In addition to BMI, MARS also measures abdominal obesity using the waist circumference and that abdominal obesity is superior to BMI (Ahmad et al., 2016). Abdominal obesity is one of the risk factors of frailty and pre-frailty among older adults (Badrasawi, Shahr and Singh, 2017). The abdominal obesity is an independent risk factor for all causes of mortality and it is associated with metabolic syndrome and cardiovascular disease (Global et al., 2016; Kivimaki et al., 2017; Sahakyan et al., 2015). Obesity is an emerging public health threat in the elderly population of developing countries including Malaysia.

Waist circumference of the respondents were measured and classified based on the cut-off point used by the International Diabetes Institute/ Western Pacific World Health Organization/ International Association for the study of Obesity/ International Obesity Task Force (WHO/IASO/IOTF, 2000). For men, the cut-off point is larger than 90 cm while for women is larger than 80 cm. MARS data shows that about 58% of the sample respondents are considered abdominally obese (Figure 7.16).

The prevalence of abdominal obesity is higher in females (65.9%) compared to males (59.2%) and is true for all age groups except for the oldest age group where the prevalence is similar for both sexes (Figure 7.17).

**Figure 7.14**: BMI by age

**Figure 7.15**: BMI by sex

**Figure 7.16**: Prevalence of abdominal obesity

**Figure 7.17**: Prevalence of abdominal obesity by sex
CHAPTER EIGHT

PHYSICAL ACTIVITIES AND COGNITION

8.1 Activities of Daily Living (ADL)
8.2 Instrumental Activities of Daily Living (IADL)
8.3 Physical activities
8.4 Cognition
8 Physical Activities and Cognition

8.1 Activities of Daily Living (ADL)

Physical activity is defined as any form of bodily movement produced by skeletal muscles, with the subdomains occupational, sports, conditioning, household, and other activities (Caspersen, Powell, & Christenson, 1985). Regular physical activity is crucial for healthy ageing (Daskalopoulou et al., 2017), where inactivity is a key risk factor for morbidity and disability (Bray, Smart, Jakobi, & Jones, 2016; McPhee et al., 2016). Notably, regular physical activity has been found to be safe for frail older people (McPhee et al., 2016).

Physical activity has significant health benefits for older adults and that physical inactivity is the fourth leading risk factor for global mortality (Kaur et al., 2015; Ahmad & Ghazali, 2012). Physical functioning is an important determinant of basic Activities of Daily Living (ADL) and is frequently referred as physical ADLs.

ADLs consist of the fundamental skills typically required to manage basic physical needs, including grooming /personal hygiene, dressing, toileting/ continence, transferring/ ambulating, and eating (Mlinac & Feng, 2016). The ability to perform ADLs is determined by cognitive (e.g., reasoning, planning), motor (e.g., balance, dexterity), and perceptual (including sensory) abilities (Mlinac & Feng, 2016).

Overall, among all activities of daily living (ADL), the highest percentage is observed for respondents requiring help to climb stairs (8.2%). The proportion of respondents needing help for ADLs increases with age, more so among those beyond 70. Respondents who need help to climb stairs range from 1.6% among those aged 40-49 to 38.4% among those aged 80+. The oldest age group reported that they require help to move around the house (17.1%) (Figure 8.1).

The prevalence in needing help for most of the ADLs including eating, climbing stairs, mobility in the house, getting in and out of bed, using the toilet, oral care and bathing is higher in females compared to males in Figure 8.2.

Figure 8.1: Respondents requiring help for ADL by age

Figure 8.2: Respondents requiring help for ADL by sex
### 8.2 Instrumental Activities of Daily Living (IADL)

Instrumental ADLs (IADLs) are normal, daily tasks, comprising meal preparation, banking and financial transactions, and shopping. The Lawton Instrumental Activities of Daily Living Scale (IADL) is a useful tool to measure independent living skills (Lawton & Brody, 1969). These skills are known to be more complex compared to the basic activities of daily living. The instrument is valuable for describing how a person is functioning currently and for finding improvement or deterioration over a period of time. There are 8 domains of function measured with the Lawton IADL scale. Evidence has shown that females were scored on all 8 areas of function, while men were not scored in the domains of food preparation, housekeeping and laundering. Nevertheless, it is important to evaluate all domains for both sexes (Coyne & Kluwer, 2019). The presence of stairs in the home was associated with prevention of IADL reduction over a 3-year period in older women without disabilities. As such, a recent study revealed that a home with stairs might facilitate retaining the ability to perform IADL among older adults without disabilities (Tomioka, Kurumatani, & Hosoi, 2018). Moreover, participation in a variety of social activities is linked to a lower rate of IADL decline in women but not in men (Tomioka, Kurumatani, & Hosoi, 2017). In addition, moderate social participation may yield positive impact in the prevention of IADL reduction, particularly in women (Tomioka, Kurumatani, & Saeki, 2018).

Among the instrumental activities of daily living (IADL), the data show that higher percentage of respondents need help for mobility (go shopping, driving, using public transportation and visiting friends and/or family) compared to other activities. This trend increases with age (Figure 8.3).

![Figure 8.3: Respondents requiring help for IADL by age](image)

Overall, higher percentages of females need help for their mobility compared to males. Higher percentages of men need help for household chores such as doing laundry, housework and making meals in contrast to females. Nonetheless, there is no difference in needing help with regards to taking medication for both sexes (Figure 8.4).
8.3 Physical activities

In general, 69.2% of study participants rarely/never perform vigorous activities such as running, swimming, cycling, aerobics, tennis, or digging with a hoe or shovel. Only a small percentage (18.1%) reported they always (every day and more than once a week) perform vigorous activities. It is prevalent that males who always perform vigorous activities (25.1% and 12.5%, respectively) (Figure 8.5).

Majority of respondents (63.5%) perform light exercise or activities such as Tai Chi, vacuuming or house cleaning. In particular, it is prevalent that a higher percentage of females (74.8%) perform light exercise/activities compared to males (49.3%) (Figure 8.7).
Overall, respondents have most difficulty in squatting/kneeling compared to walking for 100m, sitting for 2 hours and getting up from the chair. The proportion of respondents having difficulty in these basic physical functions increases with age. A big difference is observed among those aged 70 and older especially when it comes to squatting/kneeling (Figure 8.8).

Comparing these functions across sex, Figure 8.9 clearly shows that respondents having difficulty are higher among females than males. The biggest difference is getting up from chair followed by squatting/kneeling.

### 8.4 Cognition

Cherry (2019) defined cognition as mental processes involved in acquiring knowledge and comprehension. The processes comprise of thinking, knowing, remembering, judging and problem-solving. Available scientific literature points to the occurrence of changes in cognition as a person begins to age. However, the changes vary across cognitive functions and domains, where the changes in cognitive abilities of each individual are influenced by a lifetime of differences in experience, lifestyle, health status, socioeconomic status and genetic (Blazer, Yaffe, & Liverman, 2015). Murman (2015) and Harada, Natelson Love, Triebel (2013) state that cognitive abilities such as conceptual reasoning, processing speed and memory, which relate to the ability of one to quickly process information to make a decision, declines with age. However, according to the authors, other abilities such as vocabulary, cumulative knowledge and experiential skills are well-maintained/improved with age.

Cognitive impairment is a common problem among older persons. The prevalence of Mild Cognitive Impairment (MCI) was reported to be 27.3% among older persons aged 60 years and older (Samy et al., 2019). Early identification and detection of cognitive impairment is deemed important to facilitate further assessment and community-based prevention against MCI and dementia.

MARS collects data on cognition using a series of tests which include word recall, simple counting arithmetic, date, object and people naming.

Self-reported memory status indicates that 54.7% of the respondents have good
memory and 34.9% have fair memory. The proportion with good memory declines with increasing age from 66.7% among respondents aged 40-49 to 30.7% among those 80 and older (Figure 8.10).

The prevalence for good memory is higher in males (56.2%) compared to females (53.4%) (Figure 8.11).

Figure 8.10: Self-reported memory by age

Figure 8.11: Self-reported memory by sex
CHAPTER NINE

HEALTHCARE UTILISATION

9.1 Medical examination
9.2 Outpatient treatment
9.3 Hospitalisation
9.4 Private health insurance
9 Healthcare utilisation

9.1 Medical examination

Information on the patterns of healthcare utilisation is essential to facilitate the development of healthcare policies, and planning for prevention, early diagnosis and management of health conditions. This would eventually allow decrease in the health care cost, facilitating sustainability as well as reduce disability and death from medical conditions. Previous studies have demonstrated that various determinants such as sex, age, social status, type of illness, access to services and perceived quality of the service influence an individual’s healthcare seeking behaviour; however there have been discrepancies across diverse populations (Lim, Lim, Tong, & Sivasampu, 2019; Oberoi, Chaudhary, Patnaik, & Singh, 2016; Tipping & Segall, 1995).

There is a growing trend in health care utilisation by older adults. Notably, there was no significant difference in the healthcare utilisation pattern of in-patient care among women and men, for both government and private sector (Institute of Public Health, 2015). According to National Health Morbidity Survey (NHMS 2015), there was 76.7% of government utilisation of in-patient healthcare while 23.3% of private utilisation of in-patient healthcare (Institute of Public Health, 2015).

In Malaysia, nearly 75% of the older adults had registered for primary healthcare facilities and had attended health screenings and various health interventions (Yunus, 2017). MARS data showed that 74.4% of the respondents reported having done medical check-up in the past 12 months (Figure 9.1).

Among respondents who went for medical check-up in the past 12 months, 96% did so for general health screening, while 3% and 1% had cholesterol screening and other types of screening, respectively. Other types of screening include mammogram, pap smear, colonoscopy, prostate screening and bone density analysis (Figure 9.2).

Among respondents who did not go for medical check-up, reasons given include perceived no necessity for medical examination (66.4%), not expecting a problem due to satisfactory results of their previous check-up (11.3%) and being too busy (7.6%) (Figure 9.3).
9.2 Outpatient treatment

About 78% of respondents utilise government health facility for their outpatient medical treatments. About 8 in 10 respondents aged 60-79 visited government health facilities (Figure 9.4).

MARS data indicates that about 40% of respondents reported their spouses accompanied them the most during medical treatment while 35% had no accompanying person. A small proportion reported being accompanied by sons/sons-in-law and daughters/daughters-in-law as their companion (11% and 9%, respectively) (Figure 9.5).

Figure 9.3: Reasons for not going for medical examination

Figure 9.4: Types of outpatient medical treatment by age

Figure 9.5: Accompanying person for medical treatment
Spouse is the main accompanying person for respondents aged 40-69, accounting for 36% to 47%. On the other hand, respondents aged 70 and older depended on their sons or sons-in-law as their accompanying persons (>30%). The data indicates that the proportion of respondents with no accompanying person decreases with age (Figure 9.6).

![Figure 9.6: Accompanying person to outpatient medical treatment by age](image)

The prevalence of having their spouses as accompanying persons during medical treatment is higher in females than males (42.3% and 38.2%, respectively). In contrast, the prevalence of having no accompanying person are higher in males than females (50.0% and 23.3%, respectively). The prevalence of having daughters/daughters-in-law and sons/sons-in-law as their accompanying persons is lower in males compared to females (7.8% vs. 22.8%, 9.4% vs. 19.8%, respectively) (Figure 9.7).

![Figure 9.7: Accompanying person for medical treatment by sex](image)

### 9.3 Hospitalisation

Hospitalisation is an important health care service, especially among older adults. Repeated and prolonged hospitalisation is negatively associated with older patients’ health condition (Nunes et. al, 2017). Older adults had higher overall hospital admission and longer length of stay compared to younger adults (Institute of Public Health, 2015; Yunus, 2017).
Respondents were asked whether they were hospitalised in the past 12-months and 10.8% admitted so. As expected, increasing trend of hospitalisation is observed as age increases from 8.1% among respondents aged 40-49 to 18.4% among the oldest age group (80+) (Figure 9.8). As shown in Figure 9.9, there is almost no difference in the proportions of respondents who were hospitalised between the two sexes.

![Figure 9.8: Hospitalisation in the past 12 months by age](image)

Overall, majority of respondents reported they were hospitalised only once in the past one year (70.0%). The highest proportion of respondents hospitalised once is observed among those aged 40-49 (78.6%). Respondents who were hospitalised at least twice is highest among those aged 80 and older (36.7%) followed by respondents aged 60-69 (33.7%) (Figure 9.10). The data shows that no substantial difference between males and females in terms of the frequency of hospitalisation in the past 1 year (Figure 9.11).

![Figure 9.9: Hospitalisation in the past 12 months by sex](image)

![Figure 9.10: Frequency of hospitalisation frequency by Age](image)

![Figure 9.11: Frequency of hospitalisation by sex](image)

Top five health conditions requiring hospitalisation are heart diseases, ulcer or gastrointestinal disorders, accidents, asthma and high blood pressure/hypertension (Figure 9.12).
Spouses constitute the highest proportion of accompanying person during hospitalisation accounting for 44.0% followed by daughter/daughter-in-law (23.0%) and son/son-in-law (13.6%). About 12.4% of the respondents reported they had no companion during hospitalisation in the past 1 year.

The prevalence of having spouses as their companions during hospitalisation is high amongst males (61.2%) compared to females (28.2%). Daughter/daughter-in-law is reported to be the highest accompanying persons (35.4%) during hospitalisation for females. About 15% of males did not have anyone accompanying them during hospitalisation compared to 10% among females (Figure 9.14).

The role of son/son-in-law as accompanying person during hospitalisation ranges from about 6% among respondents aged 40-49 to 17% among those aged 60 and older. Meanwhile, the proportion of respondents reported having daughters/daughters-in-law as their accompanying persons increases sharply with age from 15% among respondents aged 40-49, 23% among those aged 60-69 and 47% among those aged 80 and older (Figure 9.15).
9.4 Private health insurance

Healthcare in Malaysia is provided by both public and private services. Through the expansion of the network of public health facilities comprising of public clinics and hospitals, the public health system (PHS) is able to accomplish its purpose of serving the people (Ahmad, 2019). While Malaysians are enjoying universal healthcare, there has been an increasing trend in the establishment of private healthcare facilities. In view of this, MARS collects information on private health insurance. Overall, only a small percentage (15.6%) of respondents has private health insurance. Proportion of respondents having private insurance sharply declines from 24.1% among those aged 40-49 to 1.2% among the oldest respondents (Figure 9.16). Higher percentage of males (19%) has private health insurance compared to females (12.9%) (Figure 9.17).
CHAPTER TEN

PSYCHOSOCIAL

10.1   Outlook on life
10.2   Opinions on issues related to ageing
10.3   Participation in activities
10 Psychosocial

10.1 Outlook on life

The objective of the psycho-social section of MARS is to collect information related to the respondents' personal thoughts, attitudes, and behaviour as well as interactions with their social environment which includes family, peers, and the surrounding community. This section also includes questions on social and religious activities which respondents may participate in.

Studies on successful ageing have highlighted its broad and multidimensional nature with psycho-social factors being one of the important components (Stenner, McFarquhar, & Bowling, 2010; Paul, Ribeiro, & Teixeira, 2012). A systematic review of laypersons’ perspective of successful ageing found that psycho-social aspects were the most frequently mentioned factors, more specifically being engagement and self-awareness (Cosco, et al, 2013).

Psychological variables which enable older persons to cope with age related issues and positive outlook on life appear to be highly relevant to whether they are ageing actively or not (Paul, Ribeiro, & Teixeira, 2012). Moreover, Golden, et al. (2009) reported that older people placed more importance on social engagement than physical health when describing their criteria of successful ageing. It is also recognized that older persons live and think differently in different cultures and that research related to ageing is predominantly based on Western populations (Cosco, et al, 2013; Tohit, Browning, & Radermacher, 2012). Hence, psycho-social data collected through MARS would provide insight on the characteristics of older persons within the local context. Such data also enables cross-cultural comparison of the ageing process.

Respondents were presented with 18 statements related to their feelings. They were asked to indicate how often they experienced the feelings in the last 6 months.

The following analyses organize the statements into two groups; (1) Positive outlook statements and (2) Negative outlook statements. The response to each statement was given a score based on a scale of 1 to 5 where 1=Never, 2=Rarely, 3=Sometimes, 4=Often and 5=Always. The total score was computed based on these two groups and the mean score was calculated. As shown in Figure 10.1, for each statement more than half of the respondents indicate they experienced the feelings most of the time (Often/Always) in the last 6 months. The feelings with the highest proportion of Often/Always are 'Feel in tune with the people around you' (79.1%) followed by ‘There are people you feel close to’ (78.9%).
The mean score for positive outlook statements for all respondents is 31.69 out of maximum 40.00 (79.2%) (Table 10.1). Both male and female reported almost the same mean score for each age group (Figure 10.2). The mean score shows a declining trend as we move to older age groups. In terms of negative outlook, majority of the respondents indicate they hardly experience negative feelings about life (Never/Rarely) in the last 6 months. Respondents who feel isolated or sidelined comprised 16% followed by those who lack companionship (21.2%) and those who reported feeling lonely (32.4%) (Figure 10.3).

**Table 10.1:** Score summary for positive outlook statements

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive outlook</td>
<td>8.00</td>
<td>40.00</td>
<td>31.69</td>
<td>5.70</td>
</tr>
<tr>
<td>Transformed (%)</td>
<td>20.00</td>
<td>100.00</td>
<td>79.24</td>
<td>14.25</td>
</tr>
</tbody>
</table>

**Figure 10.1:** Positive outlook statements in the last six months

**Figure 10.2:** Mean score of positive statements by sex and age
The mean score for negative outlook statements for all respondents is 17.89 (39.76%) (Table 10.2). It can be observed from Figure 10.4, the mean score for female respondents is higher than for male at all age groups, more so for those aged 60 years and older.

The data also indicates that among female respondents, the mean score shows an increasing trend as we move to older age groups (Figure 10.4).

### Table 10.2: Summary score for negative outlook statements

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative outlook</td>
<td>9.00</td>
<td>45.00</td>
<td>17.89</td>
<td>6.06</td>
</tr>
<tr>
<td>Transformed (%)</td>
<td>20.00</td>
<td>100.00</td>
<td>39.76</td>
<td>13.46</td>
</tr>
</tbody>
</table>
10.2 Opinions on issues related to ageing

Respondents were also asked to indicate how much they agree or disagree with the statements related to ageing. Overall, slightly more than 43.9% of respondents believe they do not need long term care beyond 65 (Figure 10.5).

The proportion who feels they do not need long term care ranges from 40.7% among respondents aged 40-59 to 50% among those aged 70-79. Surprisingly, 46.0% of respondents aged 80 and older feel they do not need long term care (Figure 10.5).

About three quarters of respondents across all age groups are not prepared to live in assisted living facilities (Figure 10.6). The highest proportion of respondents who are not prepared to live in such facilities is among those aged 70-79 (78.4%). A possible reason can be the negative perception of existing public assisting living facilities for older persons.

Overall, 8 out of 10 respondents agree that the government should make it mandatory for children to support their parents. The observation is similar across all age groups (Figure 10.7). This is a clear evidence of the concern of the disintegration of the traditional Asian values in filial piety among older Malaysians.
## 10.3 Participation in activities

In this section, respondents were given a list of 16 activities and asked to indicate how often they participate in each activity in the last 6 months. Figure 10.8 shows that the top 3 activities that respondents Often/Always participate in are ‘Watch television’ (66.0%) followed by ‘Activities with family/children’ (46.8%) and ‘Gardening/pets/hobbies’ (40.0%). The top 3 activities that respondents Never/Rarely participate in are ‘Group exercise’ (87.7%), ‘Sports activities’ (85.3%) and ‘Joining sports/social clubs’ (84.9%).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never/Rarely</th>
<th>Sometimes</th>
<th>Often/Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home maintenance</td>
<td>45.3%</td>
<td>17.1%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Social outings</td>
<td>44.5%</td>
<td>25.6%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Join sports</td>
<td>15.6%</td>
<td>18.4%</td>
<td>66.0%</td>
</tr>
<tr>
<td>Group exercise</td>
<td>52.5%</td>
<td>19.7%</td>
<td>27.8%</td>
</tr>
<tr>
<td>Gardening/pets/hobbies</td>
<td>49.3%</td>
<td>11.5%</td>
<td>39.2%</td>
</tr>
<tr>
<td>Use computer/smartphone</td>
<td>74.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing letters/stories</td>
<td>17.2%</td>
<td>11.3%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Watch television</td>
<td>64.2%</td>
<td>17.2%</td>
<td>18.6%</td>
</tr>
<tr>
<td>Read books/magazines</td>
<td>52.2%</td>
<td>18.1%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Non-religious meetings</td>
<td>15.6%</td>
<td>17.2%</td>
<td>66.0%</td>
</tr>
<tr>
<td>Sports/social/other clubs</td>
<td>48.9%</td>
<td></td>
<td>73.3%</td>
</tr>
<tr>
<td>Educational/training course</td>
<td>79.0%</td>
<td></td>
<td>11.0%</td>
</tr>
<tr>
<td>Volunteer/charity work</td>
<td>51.1%</td>
<td>24.5%</td>
<td>24.4%</td>
</tr>
<tr>
<td>Activities with family/children</td>
<td>30.1%</td>
<td>23.1%</td>
<td>46.8%</td>
</tr>
<tr>
<td>Care for sick/disabled adult</td>
<td>70.6%</td>
<td>12.5%</td>
<td>16.9%</td>
</tr>
</tbody>
</table>

**Figure 10.8:** Participation in various activities in the last 6 months
CHAPTER ELEVEN

SUMMARY AND CONCLUSION

11.1 Summary
11.2 Key findings
11.3 Recommendations and conclusion
11 Summary and conclusion

11.1 Summary

Malaysia Ageing and Retirement Survey (MARS) was initiated in 2018 to produce nationally representative longitudinal data on issues related to ageing. MARS was motivated by the fact that Malaysia is heading towards an aged nation and importance of having such data for formulation and implementation of relevant policies.

MARS collects comprehensive information on various aspects of personal life and experiences of people aged 40 years and older in Malaysia. The database consists of 5,613 sample respondents with a response rate of 84 percent and is comparable with other international family surveys such as Health and Retirement Survey (HRS) in the US and Survey of Health, Aging and Retirement Europe (SHARE) involving more than 20 countries in Europe. Key findings of the core components of MARS reported in this snapshot are highlighted in this concluding chapter.

11.2 Key findings

Females account for about 56% of the total respondents. Respondents aged 60 years and older comprised about 40%. Majority are married with the proportion of married respondents decreases with age. While a high proportion of them live with at least one family member, respondents who live with their spouses only, ranges from 4% among those aged 40-49, to 20% among those aged 70-79.

It is encouraging to observe that there are active transfers between respondents and children while 57% of them received such support from their children. Although over 85% of the financial transfers occur on a monthly basis, the median amount for giving and receiving financial support is RM100 and RM150, respectively. More respondents received financial support as age increases while the opposite trend is true of those giving financial support.

Respondents who were working at the time of the survey comprised of about 39%. Respondents aged 40-49 shows the highest proportion of working (60%) and gradually declines with age to about 11% among those aged 70 and older. Among respondents who were working, only a quarter of them were in technical, managerial or professional jobs.

Generally, respondents reported they were in good health. Hypertension tops the list of doctor-diagnosed disease (37%) followed by high cholesterol (21%) and diabetes (19%). However, among respondents who were not diagnosed with hypertension, 44% of them were in the category of hypertension based on their blood pressure measurement taken during the field interview. The physical measurement indicates that the prevalence of obesity and abdominal obesity is quite high, more so among women.

Majority of respondents utilise government healthcare facilities for outpatient treatment, medical check-up and hospitalisation. Only a small proportion of the respondents are covered under private health insurance.

With regards to attitudes towards life, majority of respondents are always feeling positive about life, especially in terms of having people they can turn to and
relationships with loved ones. More than half of the respondents believe that they would need long term care beyond age 65. Moreover, 8 out of 10 respondents agree that the government should make it mandatory for children to look after their older parents.

While majority of the respondents have monthly income, 20% have very little/irregular income after including private transfers. Data shows that 4 out of 10 respondents are dependent on cost of living allowance/subsidies given by the government.

Majority of respondents reported to have savings and assets. However, the total amount of savings and value of their assets are found to be very low.

This snapshot presents key findings of MARS data using frequencies, proportions and averages based on the total sample as well as subgroups of the sample. The findings indicate that Malaysians are generally healthy, have strong family relationships and positive outlook of life.

However, these aggregate findings may not necessarily portray an individual’s situation. Observations of the respondents’ physical appearances and demeanour, living conditions and their surroundings were recorded in addition to the survey questionnaire. The observations suggest that there were cases of respondents living in hardship and on the verge of destitution.

### 11.3 Recommendations and conclusion

Based on the key findings, the following recommendations are put forth. Some of these recommendations echoed the strategies suggested by earlier studies.

- **Prevention as key emphasis in strengthening health care efforts for older persons must be top priority.** There is a need to advocate on self-care that individuals be responsible for their own health and wellbeing. Strategies should be aimed at promoting active and healthy lifestyle, nutrition, participation in physical exercise and activity and regular health care screenings.

- **Family institutions should be strengthened towards promotion of family support through co-residence, financial and non-financial assistance and care of the aged parents.** Government should provide some form of incentives such as old age support allowance and income tax rebate for families to care for their elderly. Examples of such schemes are found in the U.S., Canada and Australia. This is to promote sustainable ageing in place and hence reduce the rate of institutionalisation of older persons.

- **Incentives in the form of tax relief and support for retraining and workplace accommodation should be extended to employers hiring seniors.** Programmes such as Seniors@work which is similar to Women@work should be considered as part of the Government’s initiatives to encourage seniors to continue working beyond the minimum mandatory retirement age of 60.
Efforts to professionalise the care economy must be strengthened to prepare for the increasing need in the social and care sector due to the growing number of older persons. Older persons without next of kin and close relatives are also on the rise.

Communities should be encouraged to help connect older adults with their peers and the younger generation and be better integrated into society. There is so much that the young can learn from the old and the old to learn and share knowledge and experience from one another, hence using the resources of older persons and empowering such communities.

Community participation can be implemented by establishing community centres as a one-stop centre for social, educational, recreational as well as health promotional and screening activities. Existing community centres, places of worships including mosques, churches and temples can accommodate for such activities. Private-public-NGO partnerships should be encouraged and given due recognition.

Educating the young and the very young about ageing and issues related to ageing in inculcating positive attitudes and respect towards their parents, grandparents and older members in and outside of their families should start in school. Relevant topics can be included in the existing school curriculum at appropriate primary and secondary levels.

Legislation which provides some form of protection for older persons is currently under consideration. The coverage of this legislation should be extended to ensure that adult children take full responsibility in matters pertaining to the wellbeing of their older parents.

MARS data indicate that only 10% of its respondents aged 70 years and older are still working with majority in non-professional and non-technical jobs, indicating that they are involved in informal work or self-employed. The data shows that 40% of the respondents are dependent on government Cost of Living Allowance (BSH) and that they really need the financial assistance. Therefore, it is crucial to extend the Assistance for Older Persons (Bantuan Orang Tua) to include all persons aged 70 and older.

- From our observations, evidence of cases deserving government assistance, be it Assistance for Elderly or Cost of Living Allowance (BSH), were excluded for some reason or another. Having a form of universal coverage will help reduce this exclusion.
- There were also extreme cases needing immediate attention for support in terms of their living conditions, access to basic needs and facilities. Focus should be given to this group by various stakeholders which include the Government, private entities and NGOs through their respective initiatives.
MARS project has generated a rich data set containing not only comprehensive information of the participating respondents, it also contains details of the respondents’ immediate family members including living children, parents and parents-in-law as well as siblings. It is hoped that the much needed micro and longitudinal data will provide insights and understanding of the situation of Malaysia’s mid-aged and older persons for formulation and implementation of policies that can support and protect the growing elderly community. The longitudinal nature of MARS data allows a deeper understanding of life histories and experiences of the respondents at different stages of their adult life. As ageing is a continuous process, it is also hoped that MARS will provide invaluable data for researchers, private organisations, government ministries and agencies in years to come.

"One can do so little, together we can do so much.

Let us ALL make a difference in our people’s lives."
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