

Edited by
Nguyen Cong Vu
Mai Thi Tran
Linh Thuy Dang
Choy-Lye Chei
Yasuhiko Saito

Ageing and Health in Viet Nam



Ageing and Health in Viet Nam

Copyright © 2020 by Economic Research Institute for ASEAN and East Asia (ERIA) and Institute of Population, Health and Development (PHAD).

Published by
Economic Research Institute for ASEAN and East Asia (ERIA)
Sentral Senayan 2, 6th floor,
Jalan Asia Afrika no.8
Central Jakarta 10270
Indonesia

and

Institute of Population, Health and Development (PHAD)
14th Floor, Icon4 Tower 1-3 Cau Giay st,
Dong Da, Ha Noi,
Viet Nam

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means electronic or mechanical without prior written notice to and permission from the publishers.

Layout by Fadriani Trianingsih
Cover design by Ranti Amelia, photo by istock.com/Tzido

ISBN: 978-602-54602-7-2

Suggested citation:

N.C. Vu, M.T. Tran, L.T. Dang, C.L. Chei, and Y. Saito (eds.) (2020), *Ageing and Health in Viet Nam*. Jakarta: ERIA and Ha Noi: PHAD.

Foreword

Population ageing – or the median age of a population increasing due to lower fertility rates and greater life expectancy – is unquestionably an outstanding accomplishment of the modern era.

I was born in Japan in 1952. According to the government, the total fertility rate of my birth year was as high as 2.98 children per woman in Japan – more than 2 million babies were my contemporaries. The under-five mortality rate was high, at 79.0 per 1,000 live births, and male life expectancy measured a rather low 61.90 years.

Yet in 2019 – only 67 years after my birth – Japan’s total fertility rate dropped by more than half, to 1.36 children per woman, or a total of about 865,000 births per year. The under-five mortality rate fell drastically to 2.7 per 1,000 live births, and the average life expectancy of a man had grown almost 20 years, to 81.41 years. As a result of this demographic transition, the proportion of those aged 60 years or more represented about 34.4% of Japan’s population.

Although my home country is an extreme example of population ageing, this trend is occurring worldwide, thanks to improved public health and the rapid progress of science. Because population demographics have changed so substantially within a relatively short duration – until a few centuries ago, one in four babies perished before their fifth birthdays, for example. The international community has identified population ageing as a critical issue. The Madrid International Plan of Action on Ageing, adopted at the Second World Assembly on Ageing in 2002, called for ‘changes in attitudes, policies and practices’ to fulfill ‘the enormous potential of ageing.’ Moreover, as statistics show that Asia has the most rapidly ageing population in the world – both in terms of the number of older people as well as the proportion of older people in the population’ – the promotion of healthy, active and productive ageing’ is ‘key to the well-being of older persons as valuable members of the family, community, and society,’ as recognised by ASEAN Member States in the 2015 Kuala Lumpur Declaration on Ageing: Empowering Older Persons in ASEAN.

An international organisation mandated to promote policy recommendations for ASEAN Member States on economic integration, narrowing income gaps, and sustainable development, the Economic Research Institute for ASEAN and East Asia (ERIA) is working to help fulfill the Kuala Lumpur declaration.

In 2017, ERIA received a contribution from the Government of Japan to research and to develop policy recommendations related to population ageing and long-term care, in line with its Asia Health and Wellbeing Initiative launched in 2016. ERIA subsequently created a network of activities to promote a policymaking process aimed at healthy, active, and productive ageing, including conducting various studies of older people in ASEAN Member States in collaboration with its partner organisations.

Viet Nam's pace of population ageing is amongst the fastest in the world, demonstrating the country's undeniable success in improving its health care services and systems, and that rising life expectancy is not necessarily correlated with higher economic status. Indeed, Viet Nam could become the leader of policy development in promoting healthy, active, and productive ageing in the world.

The following report, the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) aims to reveal the realities faced by older people in Viet Nam – health statuses, health care utilisation, economic well-being, use of information technology, social isolation, and care – as a step towards this goal. The next stage of this report, planned for 2021, aims to further analyse the longitudinal data contained within, including specific factors that have contributed to the improvement of health in Viet Nam to further evaluate and model this country's healthy and active ageing.

We owe the success of this report to the hard work and leadership of Dr. Vu Cong Nguyen, Deputy Director, Institute of Population, Health and Development (PHAD). I also wish to express my appreciation to the staff of PHAD for their outstanding work on this project.

This study would not have been realised without the strong support of the General Statistics Office and the General Office for Population and Family Planning of the Ministry of Health, Government of Viet Nam. In addition, local authorities' support

enabled this study to be implemented smoothly; it is my understanding that this study was also used as a training opportunity for the enumerators of the 2019 census. It is my hope that this study contributes to the improved data quality of this important national survey. A remarkable 96% response rate attests both to the great success of field supervisors and interviewers in collecting high-quality data, and good public understanding of the importance of social surveys. I would like to express my deepest gratitude to all government officials involved at both national and local government levels and I am thankful for the great success of field supervisors and interviewers in collecting high-quality data.

Furthermore, I would like to acknowledge the valuable advice provided by the LSAHV Advisory Committee. Its continued support is greatly appreciated.

Finally, I also cannot fail to recognise the respondents to this study: mothers, fathers, and grandparents. Caregivers and/or children of selected respondents were also interviewed; their kind cooperation enabled more comprehensive analysis and understanding of the realities that older people face every day.

Population ageing is a mark of success in today's complicated world, and further improving the health of all populations remains the most important target. It is my hope that information from this report, shared so generously by Viet Nam, will be fully utilised by all stakeholders – governments, international organisations, academia, civil organisations, and the private sector – toward the ultimate goal of healthy, active, and productive ageing throughout Asia – and beyond.

A stylized, handwritten signature in black ink, reading 'H. Nishimura'.

Professor Hidetoshi Nishimura
President, Economic Research Institute for ASEAN and East Asia

Message

Viet Nam is facing a rapidly ageing population that will affect many aspects of society including health, social security, socio-cultural activities, family structure, and the labour market. The Vietnamese Government is actively developing appropriate policies for the ageing population in Viet Nam. The Ministry of Health also has many policies on medical examination, treatment, and improving health care services for the elderly in Viet Nam.

The 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is the very first longitudinal study on ageing in the country. The research is well designed and has contributions by researchers from Viet Nam and Japan. The General Statistics Office of Viet Nam is also involved in sampling design to produce results representative of the ecological regions in Viet Nam. A total of 6,050 people aged 60 and over in 10 provinces of Viet Nam were randomly selected and invited to participate in the study.

The baseline survey of this study provides rich information on the health status, general well-being, and other social aspects of the elderly in Viet Nam.

I have read the report and found a lot of interesting information. The report presents quite a comprehensive overview of the health status indicators of the elderly, including 1) indicators related to physical health (height, weight, blood pressure, walking ability, balance, lung capacity, muscle distribution, body fat, and water ..); 2) mental health indicators (smoking, drinking, sleep disorders, anxiety, religious activities); 3) social health indicators (friend relationships, children, social associations) and much other valuable information. I believe that the findings of the LSAHV are very useful information for the doctors, hospital managers, heads of health authorities, social workers, consultants of intervention projects for the elderly, and policymakers in healthcare and social support for the elderly in Viet Nam.

I would like to send my compliments to the research team of the Institute of Population, Health and Development and NIHON University, Japan for successfully coordinating the baseline of this study. I also expect a successful next round, which will be conducted in 2021, for a better understanding of the health-related issues of the ageing population in Viet Nam.

A handwritten signature in black ink, appearing to read 'Trieu', is written over a long, thin horizontal line that slopes slightly upwards from left to right.

Professor Dr Nguyen Quoc Trieu
Former Minister of Health
Former Chairman of Ha Noi People's Committee
Former Head of Department of Health Protection and Care for
Central Party's Officials

Contents

Acknowledgement	x
List of Tables	xii
List of Figures	xvi
List of Acronyms	xviii
Executive Summary	xix
Chapter 1 Introduction	1
<i>Nguyen Cong Vu, Mai Thi Tran, and Linh Thuy Dang</i>	
Chapter 2 The 2018 Longitudinal Study of Ageing and Health in Viet Nam	9
<i>Nguyen Cong Vu, Mai Thi Tran, Linh Thuy Dang, and Grace T. Cruz</i>	
Chapter 3 Vietnamese Older Persons	23
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	
Chapter 4 Health Status of Older Persons	40
<i>Tuo-Yu Chen and Yasuhiko Saito</i>	
Chapter 5 Functional Health of Older Persons	59
<i>Tuo-Yu Chen and Yasuhiko Saito</i>	
Chapter 6 Healthcare and Healthcare Utilisation	71
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	
Chapter 7 Economic Well-being of Older Persons	86
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	
Chapter 8 Generativity, Attitudes, and Beliefs	95
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	
Chapter 9 Activities, Social Isolation, and Information Technology	106
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	
Chapter 10 Services for Older Persons	125
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	
Chapter 11 Family Support and Intergenerational Exchanges	135
<i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	

Chapter 12	Caregiving in Vietnamese Families <i>Elma P. Laguna</i>	146
Chapter 13	Children of Older Persons <i>Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu</i>	163
Chapter 14	Discussion, Conclusions, and Recommendations <i>Nguyen Cong Vu, Mai Thi Tran, Linh Thuy Dang, and Yasuhiko Saito</i>	183
Annex A	LSAHV Sampling Design and Weights <i>Nguyen Cong Vu, Thuy Thi Thu Vu, and Mai Thi Thanh Nguyen</i>	200
Annex B	Characteristics of Vietnamese Older Persons with Proxy Respondents <i>Linh Thuy Dang, Nguyen Cong Vu, and Oanh Thi Le</i>	205
Annex C	Research Team	210
Annex D	Advisory Committee	212

Acknowledgements

This report uses the baseline data of the 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) to provide the latest nationally representative evidence on ageing in Viet Nam. The study is part of a comparative study of ageing and health in Viet Nam and the Philippines funded by the Economic Research Institute for ASEAN and East Asia.

We express our thanks to all who contributed directly and indirectly to the project that enabled this report. Special recognition must go to Dr. Osuke Komazawa and Mr. Sota Machida, who efficiently coordinated the project from its inception to the writing of the report. We extend our gratitude to the Institute of Population, Health and Development, the LSAHV project implementer.

The study could not have been done without strong support from the General Office of Population and Family Planning of the Ministry of Health, especially Dr. Nguyen Doan Tu, general director; Dr. Pham Vu Hoang, deputy general director; and Dr. Dang Tran Giang, deputy director of the Center for Population Research, Information and Database. We express our thanks to Dr. Vu Thi Thu Thuy, director of the Department of Population and Labor Statistics, General Statistics Office of Viet Nam, Ministry of Investment and Planning, for her technical support to ensure that the sampling design and selection represented Viet Nam's population.

We are most grateful to the members of the LSAHV advisory committee for their guidance and support at critical points of project implementation: Viet Nam National Committee on Ageing, National Geriatric Hospital, National Institute of Mental Health, General Statistics Office of Viet Nam, General Office of Population and Family Planning, Viet Nam Public Health Association, and Institute of Social and Medical Studies. We owe particular thanks to the subject matter specialists for providing their expert advice in writing the report.

We give special thanks to local authorities and partners of the LSAHV in the 10 study provinces for their help in facilitating data collection. We are greatly indebted to the field supervisors and field interviewers for their hard work, commitment, and sacrifice in collecting the baseline data.

We are wholeheartedly grateful to the 6,050 LSAHV study participants and their family members, who gladly gave their time. Their contribution has given us valuable information that will be useful for plans and policies to ensure active and healthy ageing in Viet Nam.

List of Tables

Table 1.1	Countries with or without Longitudinal Surveys on Ageing: ASEAN, China, India, Japan, and Republic of Korea	3
Table 2.1	Sample Areas of the 2018 Longitudinal Study of Ageing and Health in Viet Nam	14
Table 2.2	Number of Respondents per Questionnaire	19
Table 3.1	Household and Housing Characteristics	25
Table 3.2	Percent Distribution of Older Persons by Sex and Age	28
Table 3.3	Sociodemographic Profile of Older Persons by Sex and Age	29
Table 3.4	Living Arrangement and Residential History by Sex and Age	31
Table 3.5	Characteristics of Parents and Siblings by Sex and Age	32
Table 3.6	Children of Older Persons by Sex and Age	34
Table 3.7	Grandchildren of Older Persons by Sex and Age	35
Table 4.1	Self-assessed Health by Sex and Age	41
Table 4.2	Diagnosed Illnesses by Sex and Age	42
Table 4.3	Experience of Heart Attack by Sex and Age	43
Table 4.4	Oral Health by Sex and Age	43
Table 4.5	Sleeping Habits by Sex and Age	45
Table 4.6	Experience of Pain by Sex and Age	46
Table 4.7	History of Falls by Sex and Age	48
Table 4.8	Incontinence by Sex and Age	48
Table 4.9	Smoking by Sex and Age	49
Table 4.10	Drinking by Sex and Age	50
Table 4.11	Objective Measures of Health by Sex and Age	52
Table 5.1	Activities of Daily Living (ADLs) by Sex and Age	60
Table 5.2	Instrumental Activities of Daily Living (IADLs) by Sex and Age	61
Table 5.3	Washington Group Short Set on Functioning by Sex and Age	63
Table 5.4	Global Activity Limitation Index (GALI) by Sex and Age	65

Table 5.5	Experience of being Bedridden by Sex and Age	65
Table 5.6	Nagi Functioning Measures by Sex and Age	66
Table 6.1	Inpatient Utilisation by Sex and Age	72
Table 6.2	Outpatient Utilisation by Sex and Age	74
Table 6.3	Unmet Need for Healthcare by Sex and Age	75
Table 6.4	Health Insurance Coverage by Sex and Age	76
Table 6.5	Level of Use and Source of Medicines and Supplements by Sex and Age	77
Table 6.6	Person Who Usually Takes Care of Older Person When He/She is Sick Since Age 60 by Sex and Age	78
Table 6.7	Long-term Care by Sex and Age	79
Table 7.1	Sources of Income and Median Monthly Income by Sex and Age	87
Table 7.2	Most Important Source of Income by Sex and Age	89
Table 7.3	Assets and liabilities by Sex and Age	90
Table 7.4	Sufficiency of Household Income by Sex and Age	91
Table 7.5	Self-assessed Economic Well-being Whilst Growing Up by Sex and Age	92
Table 8.1	Generativity by Sex and Age	98
Table 8.2	Attitudes and Beliefs by Sex and Age	100
Table 9.1	Activities by Sex and Age	108
Table 9.2	Religious Activities by Sex and Age	109
Table 9.3	Membership in Organisations by Sex and Age	111
Table 9.4	Loneliness of Older Persons by Sex and Age	113
Table 9.5	Social Isolation from Relatives Not Coresiding with Older Person by Sex and Age	114
Table 9.6	Social Isolation from Friends by Sex and Age	116
Table 9.7	Life Satisfaction by Sex and Age	118
Table 9.8	Use of Information Technology by Sex and Age	119
Table 10.1	Awareness and Use of Services by Sex and Age	127
Table 10.2	Attitudes Towards Homes for the Aged by Sex and Age	130
Table 11.1	Social Contact Between Older Persons and Non-co-resident Children in the Past 12 Months by Sex and Age	137

Table 11.2	Assistance Provided by Older Persons to Co-resident and Non-co-resident Children in the Past 12 Months by Sex and Age	138
Table 11.3	Assistance Received by Older Person from Co-resident and Non-co-resident Children in the Past 12 Months by Sex and Age	139
Table 11.4	Exchange of Financial Support Between Older Persons and Children by Sex and Age	141
Table 11.5	Attitudes Toward Family Support of Older Person by Sex and Age	142
Table 12.1	Type of Caregivers by Sex and Age of Older Persons	148
Table 12.2	Characteristics of Primary Caregivers by Sex and Age of Older Persons	149
Table 12.3	Relationship and Living Arrangement of Primary Caregivers to/with Older Persons, by Sex and Age of Older Persons	150
Table 12.4	Self-Assessed Health of Primary Caregivers of Older Persons by Sex and Age of Older Persons	151
Table 12.5	Primary Caregivers' Perception on Older Persons' ADL Difficulty by Sex and Age of Older Persons	152
Table 12.6	Primary Caregivers' Perception of the Need for Assistance of Older Persons with ADL Difficulty by Sex and Age of Older Persons	153
Table 12.7	Assistance Given to Older Persons for Various Activities of Daily Living by Sex and Age of Older Persons	154
Table 12.8	Difficulty in Caring for Older Persons by Sex and Age of Older Persons	156
Table 12.9	Situation as a Primary Caregiver by Sex and Age of Older Person	157
Table 12.10	Characteristics of Potential Caregivers by Sex and Age of Older Persons	158
Table 12.11	Relationship of Potential Caregiver to the Older Person by Sex and Age of Older Persons	159
Table 12.12	Self-Assessed Health of Potential Caregivers of Older Persons and their Willingness to Assume the Caregiver Responsibility by Sex and Age of Older Persons	160

Table 13.1	Characteristics of Children by Sex and Age of Older Persons	164
Table 13.2	Relationship to Older Persons by Sex and Age of Older Persons	166
Table 13.3	Support Given to Older Persons by Sex and Age of Older Persons	171
Table 13.4	Support Received from Older Persons by Sex and Age of Older Persons	173
Table 13.5	Perception of Children on the Health Status of Older Persons by Sex and Age of Older Persons	175
Table 13.6	Perception of Children on the Cognitive Decline of Older Persons by Sex and Age of Older Persons	177
Table 13.7	Attitudes and Beliefs of Children by Sex and Age of Older Persons	178
Table A1	Selected Provinces and Sample Distribution	202
Table B1	Profile of Respondents by Proxy Status and Screening Type (Unweighted Data)	206
Table B2	Reasons for Having a Proxy (First Screening) by Background Characteristics (Unweighted Data)	208

List of Figures

Figure 1.1.	Population by Age Group, Viet Nam	2
Figure 2.1.	Conceptual Model of Health States and Health Transitions according to the Disablement Process	10
Figure 2.2.	Conceptual Framework for Factors Related to Health Outcome	13
Figure 2.3.	The 2018 Longitudinal Study of Ageing and Health in Viet Nam: Sample Areas	15
Figure 2.4.	Study Sample	19
Figure 3.1.	Status of Ageing: Viet Nam, Singapore, and Japan, 1950–2045	24
Figure 4.1.	Mean Number of Natural Teeth by Sex and Age (%)	44
Figure 4.2.	Older Persons Often Troubled with Pain by Sex and Age (%)	47
Figure 5.1.	Functional Difficulty of Older Persons by Sex	67
Figure 5.2.	Functional Difficulty of Older Persons by Age	68
Figure 6.1	Public Healthcare Management for Older Persons	71
Figure 6.2	Distribution of Main Caregivers of Older Persons Currently Under Long-term Care by Sex and Age (%)	81
Figure 7.1	Self-assessed Economic Well-being by Sex and Age (%)	91
Figure 8.1	McAdams' Seven Features of Generativity	95
Figure 8.2	Best Living Arrangement of Older Persons by Sex and Age (%)	102
Figure 9.1	Percentage of Vietnamese Older Persons Who Said Religion Is Very Important in their Lives by Sex and Age (%)	110
Figure 9.2	Current Life Satisfaction by Sex and Age (%)	118
Figure 10.1	Use of Privileges by Sex (%)	129
Figure 10.2	Use of Privileges by Age (%)	129

Figure 11.1	Exchange of Assistance between Older Person and Co-resident Children (%)	140
Figure 11.2	Social Contact and Exchange of Assistance between Older Person and Non-co-resident Children (%)	140
Figure 13.1	Living Arrangement with Older Persons by Sex and Age of Older Persons (%)	168
Figure 13.2	Perception of Children on the Health Status of Older Persons by Sex and Age of Older Persons (%)	174

List of Acronyms

ADL	Activities of Daily Living
ASEAN	Association of Southeast Asian Nations
BMI	Body Mass Index
CES-D	Center for Epidemiological Studies – Depression Scale
ERIA	Economic Research Institute for ASEAN and East Asia
GALI	Global Activity Limitation Index
GOPFP	General Office for Population and Family Planning
GSO	General Statistics Office
HI	Health Insurance
HTN	Hypertension
IADL	Instrumental Activities of Daily Living
ICT	Communication Technology
IQCODE	Informant Questionnaire on Cognitive Decline in the Elderly
IT	Information Technology
LGS	Loyola Generativity Scale
LSAHP	The Longitudinal Study of Ageing and Health in the Philippines
LSAHV	The Longitudinal Study of Ageing and Health in Viet Nam
LTC	Long-term Care
OP	Older Person
PHAD	Institute of Population, Health and Development
SDGs	Sustainable Development Goals
SPMSQ	Short Portable Mental State Questionnaire
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
VNAS	Viet Nam Aging Survey
WG-SS	Washington Group Short Set on Functioning
WHO	World Health Organization

Executive Summary

The 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is the first nationally representative longitudinal study of ageing in Viet Nam. The study aims to (i) investigate the health status and well-being of older persons (OPs) and their possible correlates, and (ii) assess the determinants of health status and transitions in health status and overall well-being. The LSAHV is part of a comparative study of ageing and health in Viet Nam and the Philippines and is funded by the Economic Research Institute for ASEAN and East Asia (ERIA). The Institute of Population, Health and Development (PHAD) is the implementing agency in Viet Nam.

A total of 6,050 OPs aged 60 and above were interviewed for the baseline survey, with a response rate of 96%. The survey employed a multistage sampling design for data collection. Provinces were the primary, villages secondary, and OPs the ultimate sampling units. The survey oversampled those aged 70–79 with a factor of two and those aged 80 and above with a factor of three. Data collection started in late 2018 and was completed in May 2019. The interviews were conducted using tablets. The follow-up survey is scheduled for 2020.

The analyses were conducted on various dimensions of health and well-being with respect to age and sex of OPs. This report provides OPs', their caregivers', and adult children's perception of OPs' health and well-being. Using LSAHV data, we can compare Viet Nam and other ageing societies to gain understanding on health status of OPs.

Older Persons in Viet Nam

Female OPs (57.2%) outnumber males. The overall mean age of OPs is 70.6 years: 70.2 for males and 70.8 for females. More males (82.1%) than females (47.7%) are married or living in. OPs have a relatively low educational profile: 20.8% have no schooling and 35.7% have an elementary education. Only 6.5% have a college education. The educational profile improved across age cohorts: OPs with at least a high school education rose from 3.4% for the oldest cohort (aged 80+) to 11.4% for the youngest cohort (60–69). About one-third (33.8%) continue to be economically productive.

The most common living arrangement is co-residence with at least one child (61.3%) and is more common amongst females (62.6%) than males (59.6%). Most OPs have been living in their current residence for at least 5 years (54.7%) or since birth (40.5%). Most OPs (61.1%) perceive rural areas as ideal places to live.

Only 11.8% of OPs have a surviving father or mother; 9.5% have surviving mothers and only 3.6% have surviving fathers. OPs have an average of five siblings, of whom about four are still alive. Nearly all OPs have children (97%); on average, they have four, of whom about four are still alive. About one-fifth of OPs experienced at least one child mortality. Two percent of OPs have an average of two adopted children or stepchildren. At least 91.1% of OPs reported having at least one grandchild from their biological children, stepchildren, and adopted children. They became grandparents at about 51 years. Less than one-fifth of OPs (19.1%) are involved in the partial or full care of any of their grandchildren. No sex difference was reported in the care of grandchildren (female: 19.3%; males: 18.9%).

Self-assessed Health

Overall, OPs perceive themselves as healthier now than in the past. Most (51.1%) consider themselves to have been healthier than average from birth to 16 years but see their current health as average (47.7%). More females than males rate themselves as of average health or unhealthy in the past and now. OPs reported poorer health with increasing age.

Diagnosed Illness

We asked OPs about two groups of diseases. Group-1 diseases are not life-threatening and OPs recognise them. Group-2 diseases require a medical diagnosis. The most common group-1 diseases are arthritis, neuralgia, or rheumatism (45.8%), and chronic back pain (30.3%). More females than males have group-1 diseases. The most common group-2 diseases are high blood pressure (40.9%) and digestive illness (18.6%). Cerebrovascular disease, respiratory disease, renal or urinary tract ailments, tuberculosis, liver or gallbladder disease, and cancer are more prevalent amongst males, while diabetes, digestive illness, osteoporosis, glaucoma, and slipped disc are more prevalent amongst females. Older age is significantly related to high blood pressure and respiratory illness.

About 10% of OPs have had a heart attack. The mean age at the time of the heart attack was significantly higher for older age groups. Of OPs who have had a heart attack, 70.5% are using medication for their heart condition.

Oral Health

About 5% of OPs do not have any natural teeth. The average number of teeth is 22, with an average of 10 pairs of functional teeth; Seventeen percent of OPs have dentures; most (92.4%) use them for eating and are satisfied with them. More females than males use dentures. Older age is significantly related to a higher prevalence of no teeth, a lower number of natural teeth, and a lower number of paired teeth.

Sleep, Pain, Falls, and Incontinence

On average, OPs sleep 5.4 hours per night (males: 5.5; females: 5.2). Although over half of OPs (56.5%) are satisfied with their sleep, about one in four say that most of the time they have trouble falling asleep, wake up during the night, or wake up too early, unable to return to sleep. About 8% reported using sleep medications or treatment.

More than 30% of OPs are troubled with pain. Amongst them, 68.4% reported moderate and 7.7% severe pain. About 60% of OPs have difficulty performing their usual activities because of pain. The most frequent location of pain is the back and the least frequent the neck. More females than males experience significant pain.

About 8% of OPs reported that they had fallen in the previous 12 months. The average number of falls was 3.7 times and 37.6% of OPs who had fallen were injured seriously enough to need medical attention.

Most OPs (94.6%) reported no loss of control. Amongst those who had incontinence, the frequency of sometimes, often and very often was high.

Health Risk Behaviours

About 15% of OPs smoke on average 12 cigarettes per day. More males (33.0%) smoke than females (1.6%), with no age difference. The younger age group, however, smoked significantly more cigarettes per day (60–69: 13) than the older age group (80+: 9). About 22% of OPs drink, over a third occasionally (35.1%). Male drinkers

(47.2%) significantly outnumber females (2.8%). Younger drinkers (60–69: 26.6%) outnumber older drinkers (80+: 10.0%).

Anthropometric Measures

Body mass index (BMI) differs significantly across age groups: more younger OPs are obese (≥ 30 kilograms [kg]/square metre [m²]) or overweight (25–29.9 kg/m²) and more older OPs are underweight (< 18.5 kg/m²). The average waist circumference of OPs is 84.5 centimetres, which significantly declines as they age. Mean grip strength is 24.1 kg for males and 16.3 kg for females. Older age is significantly related to decrease in grip strength. Male OPs significantly hold longer for the semi-tandem tests than female OPs, but not for the side-by-side and tandem tests in the balance test. Older age is significantly related to poor performance in all three balance stances. Females have a slower average gait (14.7 seconds) than males (12.6 seconds). Older age is significantly related to slower gait.

Functional Health

About 15% of OPs have at least one activity of daily living (ADL) difficulty. The most common ADL difficulty is going outside (leaving the house) (males: 9.7%; females: 13.1%). The least common ADL difficulty is eating (males: 3.0%; females: 4.0%). More females than males have at least one ADL difficulty; females have a higher average number of ADL difficulties, increasing with age. More OPs have more instrumental activity of daily living (IADL) difficulties (29.5%) than ADL difficulties (15.0%). The most common IADL difficulty is using the telephone (males: 12.8%; females: 20.1%). Significantly more females than males have at least one IADL difficulty (33.7% vs. 23.9%). More OPs 80+ (61.7%) experience at least one IADL difficulty, followed by those 70–79 (34.4%) and 60–69 (18.2%).

We used the Washington Group Short Set of Questions on Disability (WG-SS) and found that 64.4% of OPs have at least one difficulty amongst the six activities (males: 59.1%; females: 68.3%). For males, the most common difficulty is remembering or concentrating (40.6%). About half the females have at least some difficulty walking or climbing steps (51.6%) and remembering or concentrating (52.1%). The proportion of OPs having difficulty in all six activities increases with age.

The Global Activity Limitation Index (GALI) is a one-item measure of functional status. Most OPs (46.8%) report being limited but not severely in their usual activities because of a health problem. About 13% perceive themselves as severely limited; the proportion increases with age (60–69: 6.9%; 70–79: 12.7%; 80+: 33.7%).

Being bedridden in the past 2 weeks was used to assess short-term immobility. About 2% of OPs were bedridden in the previous 2 weeks. The proportion of bedridden OPs increased from 1.2% amongst those 60–69 years to 2.7% amongst those 70–79 and 7.1% amongst those 80+.

The Nagi functional measures were used to assess functional health. About 64% of OPs have difficulty with at least 1 of the 10 activities, with significantly more females than males having difficulty (70.6% vs. 54.1%). The most common activity with difficulty is standing (without sitting) for 2 hours (50.2%) (males: 41.1%; females: 57.0%). The percentage of OPs with at least one difficulty increases to 86.8% amongst those 80+, from 54.2% amongst those 60–69 and 69.8% amongst those 70–79.

Formal Care and Unmet Need for Health Service

Most OPs prefer to utilise public facilities (94%) than private facilities (5%) for inpatient care. A total of 21.9% of all OPs availed themselves of inpatient care in the past 12 months and the percentage increases with age. The average number of times all OPs stayed in a facility was 2.3 in the previous year. Their hospital expenses were mainly paid by their children (42%), followed by themselves (37%) and their spouse (14%). Most hospitalised OPs (92%) are covered by the national insurance system, either as members (90.2%) or as dependents of members (1.4%).

The utilisation pattern of outpatient care is similar to that of inpatient care: OPs prefer public facilities (87%) rather than private facilities (13%). About 30% of OPs received medical care for an illness or accident in the previous 12 months without staying overnight in a medical facility; the percentage is slightly higher for women (29.7%) than men (26.6%). The outpatient utilisation percentage increases with age. Generally, about 70% of those who used outpatient care were seen by a physician.

About 13% of OPs did not go to a doctor for medical care when they felt ill in the previous 12 months. Lack of financial resources (35.7%) is the most common reason for not seeking medical care.

Health Insurance and Medicines

Most OPs (91%) have health insurance. The national health insurance system is free for the poor (11.3%); ethnic minorities (11.3%); and ‘merit’ people such as veterans, Vietnamese Heroic Mothers (who have had many children who were soldiers who died in the war), spouses of martyrs, and war invalids (37.5%). About 32% of OPs are covered by voluntary health insurance.

Informal Care and Long-term Care

When OPs fall sick, they are cared for by their spouse (40.8%), a son (30.7%), or a daughter (13.1%). Men (61.1%) tend to cite their spouse, while women (36.1%) are more likely to report their son as their primary caregiver. The percentage of OPs cared for by a spouse decreases with age and the percentage cared for by a son increases with age.

About 20.4% of OPs receive care because of a continuing health condition and are under long-term care (LTC). The three most common LTC givers are the spouse (44.9%), a son (31.0%), and a daughter (13.7%), while the extended family – grandchild, daughter-in-law, and sibling – provides 9.8% LTC. Should they develop dementia or become bedridden or an invalid, OPs said they would prefer to be cared for by a son (38%), spouse (34%), or daughter (17%).

Economic Well-being

The three most commonly cited income sources of OPs are children living in the country (38.5%), earnings from work (37.3%), and pension (23.8%); 15.9% of OPs receive government subsidies and 10.8% earn from family business. About 28% of OPs had an annual household income in the previous 12 months of VND10 million to VND50 million (about US\$430–US\$2,145); 11.4% have an annual household income of less than VND2 million (about US\$86). Only a small proportion (6.2%) are in the highest annual household income category of more than VND100 million (about US\$4300 USD).

Most OPs (94.7%) have at least one asset. The most common nonfinancial assets owned by OPs are the house where the OP resides (85.5%), followed by appliances (55.7%) and motor vehicles (40.1%). About half of OPs (46.5%) have cash in hand but only a small proportion (6.9%) have bank savings; 15% of OPs own other real estate

and 11.6% have jewellery. The percentages of house, jewellery, appliances, and motor vehicles decline significantly as the OPs age.

A small proportion (5.6%) of OPs have liabilities. The percentages of OPs with liabilities decline as OPs age (60–69: 8.0%; 70–79: 3.3%; and 80+: 0.7%). The most mentioned liability is a bank loan (84.1%), followed by a personal loan (11.8%) and government loan (2.4%).

OPs' overall economic well-being is average, measured objectively and subjectively; 31.9% have enough money with some left over, while nearly half (49.9%) have a household income that is just enough to pay expenses with no difficulty. A small proportion (10.3%) have some difficulty meeting household expenses, while only 4.4% have considerable trouble doing so. More than half of OPs grew up in financially average (54.0%) and well-off families (2.8%), while about 42.1% grew up in poor families.

Generativity, Attitudes, and Beliefs

The LSAHV is the first to study generativity of Vietnamese OPs. The study used the simplified version of the Loyola Generativity Scale to measure generative concern. OPs scored themselves highest on being needed by other people and having important skills to pass along to others. They also think they have a good influence on the lives of others, feel that many people rely on them for advice, and are keen to teach or impart knowledge to other people. OPs scored themselves the lowest on making unique contributions to society: 1 in 4 think they do not have important skills that can be passed on to others, and more than half (51.6%) said others would never say they have made valuable contributions to society.

Most OPs continue to maintain traditional beliefs such as children being obliged to care for their ageing parents to repay them for their sacrifices. Almost all OPs (98.4%) think their children must support and care for them; 75.7% think that parents have the duty to do their utmost for their children even at the expense of their own well-being. Many OPs still believe in traditional gender roles; more than half (53.7%) are keen to live with their sons rather than their daughters. OPs are open to falling in love or (re) marrying after their 60s.

Although OPs prefer to co-reside with a son, about half think it a good idea to live with their children in rotation. OPs perceive themselves as capable of looking after themselves: 13.5% prefer to live independently and 24.7% by themselves but near one or more children.

Leisure Activities, Religiosity, and Volunteerism

OPs often participate in sedentary activities such as watching TV (79.5%), listening to the radio (32.4%), and reading (13.5%), and in physical activities such as gardening (35.0%) and physical exercise (25.7%). OPs' social activities are mostly hanging out with friends and neighbours (31.1%).

In general, OPs are not highly interested in participating in religious activities. Only 12.6% reported attending religious activities outside the home and less than 10% consider religion very important. About 25% are members of a nonreligious organisation. Organisations of retired OPs attracted the most OPs (85.6%). Overall, 9.8% engage in volunteer work in church or the community, with females (12.2%) more likely to do so than males (7.2%).

Loneliness, Social Isolation, and Life Satisfaction

Most OPs are not lonely: 74.8% never or rarely feel a lack of companionship, 86.0% do not feel left out, and 87.7% do not feel isolated from others. Only a small proportion feel a lack of companionship (3.9%), left out (1.5%), and isolated from others (1.6%).

We used the revised Lubben social network scale to assess social isolation. Levels of perceived social isolation from friends and relatives not residing with the OPs are as low as the OPs' level of loneliness. OPs are satisfied with the quality and quantity of contact with friends and relatives not residing with them.

Use of Information Technology

A small proportion (12.7%) of OPs have access to and spend an average of 2.3 hours daily on the Internet. The cell phone is the most commonly used information technology (IT) gadget (58.4%), while tablets (1.5%) and laptops (2.3%) are not common; 90.3% use IT gadgets mainly to connect with family and friends and 46.7% do not need any assistance. Those needing assistance in using an IT gadget receive it mainly from family members (son, daughter, spouse, or grandchild).

Services for Older People

OPs have a low level of awareness of government programmes that provide privileges to senior citizens. Although 85.5% of OPs own a senior citizen ID card, which helps them receive privileges, only 27.0% are aware of them. The most frequently used privileges used by OPs are medical priority service (43.0%), discounts on transportation (42.5%), legal aid to OPs (27.1%), assistance for poor OPs (26.5%), income tax exemption (25.5%), and the longevity-wishing ceremony for OPs 90 or over (23.0%).

About half the OPs think it is a good idea to have homes for the aged. In Viet Nam, many generations live in one household, and the children and grandchildren are responsible for caring for the OPs. Most OPs (67.3%) think that living in a home for the aged is beneficial for OPs who do not have anyone to care for them. They said that such facilities would reduce the OPs' family caregiving burden (58.3%), take better care of their health (54.2%), and give them a better chance to socialise with their peers (52.0%). More than two-thirds (69.7%), however, prefer not to live in a care facility even it is near their current residence.

Family Support and Intergenerational Exchanges

The OPs are not only recipients but also providers of all forms of support: 85.8% visited and 95.0% were visited by at least one of their non-co-resident children in the 12 months before the survey; most (93.1%) contacted their non-co-resident offspring through letters, telephone calls, or text messages; 96.4% received such communication from their children. This high frequency of social contact between OPs and non-co-resident children suggests their close relationship.

Most OPs (about 78%) provide emotional support to their children regardless of the residence of children. Co-resident children receive more support from OPs than non-co-resident children: material (30.8% vs. 19.5%), financial (27.2% vs. 18.7%), and instrumental (26.2% vs. 10.3%)

About 85% of OPs receive emotional support and 60% monetary assistance from their children regardless of the children's residence. OPs received more support from co-resident than non-co-resident children – material (71.8% vs. 61.0%) and instrumental (56.6% vs. 30.4%).

About 25.2% of OPs intend to rely on their children for financial support. More than 90% are satisfied with the level of contact they have with their children and the level of assistance they receive from them.

Potential and Primary Caregivers

A total of 3,619 primary (73.2%) and potential (26.8%) caregivers participated in the LSAHV. Slightly more primary caregivers provide care to male (75.2%) than female OPs (71.6%). The proportion of OPs with primary caregivers increases with the OPs' age.

The percentage of male and female caregivers (48% vs. 52%) is almost equal, with 65% of female OPs cared for by males and 72% of male OPs cared for by females. The mean age for male caregivers is 55.6 years and for female caregivers 49.8. Most primary caregivers are married (82.9%) and have an elementary or high school education (64.9%). About 70% of caregivers are working, whilst 28.8% have stopped working completely. Less than 2% of primary caregivers have caregiver training. Most caregivers are the OPs' children (44.4%) or spouse (43.2%), and 9 in 10 live with the OPs. About two-thirds of primary caregivers consider themselves of average health.

A quarter of primary caregivers reported that the OP they were caring for has difficulty performing at least one activity of daily living (ADL) and 82.7% said the OP needs assistance in performing at least one ADL. Primary caregivers mostly assist OPs with household tasks (49.5%), followed by moving around and going out (20.3%), and personal care (17.6%). Most primary caregivers volunteered for the job (86.6%), whilst 10.0% became the primary caregiver because they are the only ones available. About 60% of them gain satisfaction from performing their care tasks, and 25.7% receive support from family members, friends, and others in performing their care tasks.

Of those who responded to the caregiver survey, 26.8% considered themselves potential caregivers. More than half the potential caregivers are males (56%). The mean age of potential caregivers is 48.0 years old. Six in ten female OPs have male potential caregivers, whilst more than half of male OPs mentioned a female potential caregiver. Like primary caregivers, most potential caregivers are married (76.7%) and with at least an elementary or high school education (71.9%). Three in four are working and less than 1% have caregiver training. Care for the OPs is expected mainly of adult children (56.3%) and the spouse (29.1%). Most potential caregivers reside with the OPs (77.6%), whilst 11.5% live next door and 4.2% live in the same commune.

About 65% of potential caregivers rated their health as average. They overwhelmingly (97.0%) reported that they are willing to become the OP's caregivers.

Adult Children of Older People

We interviewed 2,898 adult children of OPs, with slightly more males (56.2%) than females (43.8%). They are most likely to be living with their parents (73.0%) or living next door (12.8%). Generally, they have very good relationships with their parents and only about 10% reported not-so-good or poor relationships. The results show a disproportional exchange of support, with the flow of support from adult children to their parents exceeding the reverse flow. Only 16.9% of adult children received financial support from their parents in the month before the interview, whilst 52.9% of OPs received financial support from their children.

Most adult children perceive their parents as capable of living independently even with medical conditions. About 44% reported that their parents are still functional and 39.8% said their parents have medical conditions but are functional. Only 7.3% perceived their parents as having medical conditions and needing the assistance of a caregiver. Adult children and other family members are the main care providers of OPs who require assistance. Adult children reported that their mothers suffered greater deterioration than their fathers in the previous 2 years.

Almost all the interviewed adult children (98.1%) expressed positive views regarding filial expectations. They said they would care for their ageing parents and most agree (87.4%) that parents have a duty to do their best for their children even at the expense of their own well-being. Traditional beliefs on gender roles remain amongst children of OPs. About 57% agree with the traditional division of labour and only less than half (43.6%) agree that co-residence with a daughter is more suitable for ageing parents than with a son.

Conclusions

The results of the descriptive analyses of the LSAHV baseline survey data by gender and by age group are shown in this report. The findings from the analyses provide information needed to understand the current health, economic, social, and overall well-being of those aged 60 and above in Viet Nam. The government is well aware of the challenge of population ageing. We hope that these findings are useful for evidence-based policymaking to improve OPs' health and that practitioners and all relevant agencies will use them to help improve OPs' well-being.

Introduction

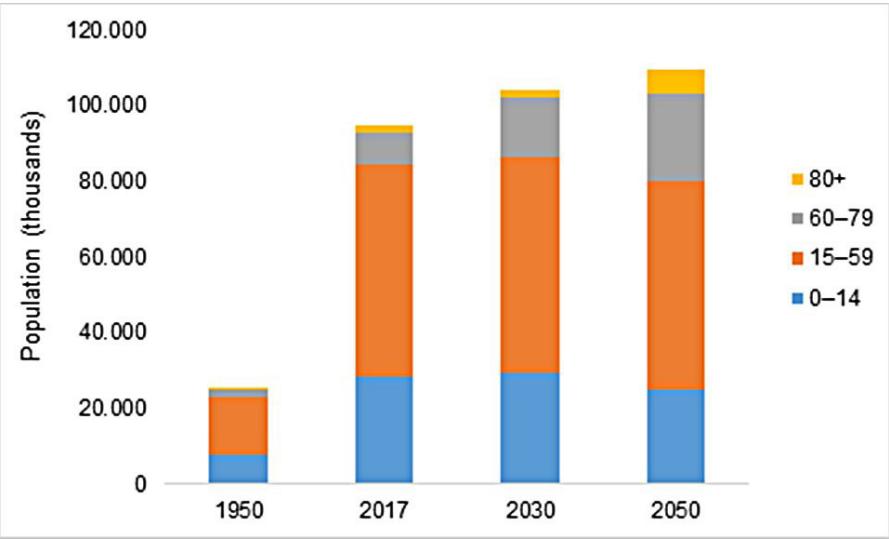
Nguyen Cong Vu, Mai Thi Tran, and Linh Thuy Dang

The world's population is ageing (UNDESA Population Division, 2017). Most countries face a growing number and proportion of older persons (OPs). In Viet Nam, the number of OPs (aged 60 and over) has grown rapidly and is projected to continue growing in the coming decades. In 2017, the number of OPs in Viet Nam reached 11% of the population (about 10.6 million people) and is expected to reach 17.5% in 2030 (about 18.6 million) and 28% in 2050 (about 32 million) (Figure 1.1) (UNDESA Population Division 2017).

Population ageing and the well-being of OPs are major emerging challenges for families, communities, and governments. In response, international organisations have issued global frameworks and agreements on ageing, such as the Political Declaration and Madrid Plan of Action on Ageing (United Nations, 2002) and the World Health Assemblies on Strengthening Active and Healthy Ageing (World Health Organization, 2005). The 2030 Agenda for Sustainable Development sets out a universal plan of action that seeks to ensure development for all segments of society, especially the most vulnerable, including OPs (UNDESA Population Division, 2015). The 20th Association of Southeast Asian Nations (ASEAN) Plus Three Statement on Active Ageing (ASEAN, 2016) reasserted the commitment of the member countries to promote active ageing. ASEAN aims to develop a regional plan of action to implement the Kuala Lumpur Declaration on Ageing: Empowering Older Persons in ASEAN (ASEAN, 2015). These plans are compatible with Viet Nam's policies. The government has been giving serious attention to ageing issues. For instance, legal frameworks and government regulations are in place to guarantee the rights of OPs and ensure their well-being. In 2009, the government enacted the Law on the Elderly (No. 39/2009/QH12), followed by government regulations on policies on OPs (e.g. No. 06/2011/NĐ-CP) and a Ministry of Health decree (No. 35/2011/TT-BYT).

The Prime Minister approved the Decision No. 1781/QD-TTg, 2012–2020. It aims to improve the quality of care for OPs, socially mobilise care activities, and give OPs a role in accordance with the country’s actual and potential socioeconomic development. In 2013, the Ministry of Health included the indicator ‘number of beds for elderly patients’ to assess the quality of hospital services. In 2018, the ministry published circular 2248/BYT-KCB on standardising geriatric departments at provincial hospitals to meet growing demand to protect the health of the elderly.

Figure 1.1. Population by Age Group, Viet Nam



Source: UNDESA Population Division (POP/DB/PD/WPA/2017).

In 2011, the first national survey on ageing was conducted in Viet Nam. The Vietnam Aging Survey (VNAS 2011) (VWU, 2012) provided in-depth information on the socioeconomic and health profile of the OPs across various areas and regions. The design and questionnaires considered cultural differences between regions and ethnic groups. Whilst the contribution of the VNAS 2011 is significant, some aspects of ageing cannot be understood using cross-sectional design, i.e. changes in health status and identifying potential causes of such changes.

To gain deeper understanding of ageing process, a longitudinal design is needed to follow the same group of survey respondents through time (Birren and Schaie, 2001; Fozard et al., 1990) and enable researchers to observe changes in the target

population at both the group and individual levels. Longitudinal studies are becoming common in ageing societies although they are more expensive than cross-sectional studies to conduct. The longitudinal ageing studies have helped analyse the many issues related to old-age health, such as cognitive function, socioeconomic status, health status and physical performance, morbidity and mortality predictors, healthcare costs, and genetics (Stanziano et al., 2010). Longitudinal data have been widely used to understand health transitions such as the timing of the emergence of various health problems, progression of diseases, loss of functioning, cognitive decline, and factors that determine these life trajectories (National Academies of Sciences, Engineering, and Medicine, 2018; Newsom et al., 2013).

Unlike other Asian countries, Viet Nam has no longitudinal data on OPs (Table 1.1). Scientific data infrastructure that allows tracking of OPs' health status and healthcare is also lacking and is needed to formulate policies to adapt to OPs' conditions over time.

Table 1.1. Countries with or without Longitudinal Surveys on Ageing: ASEAN, China, India, Japan, and Republic of Korea

With Longitudinal Surveys on Ageing		Without Longitudinal Surveys on Ageing	
Country	% of the Population 60+ Years	Country	% of the Population 60+ Years
Japan	32.8	Viet Nam	10.3
Rep. of Korea	18.4	Myanmar	8.9
Singapore	17.9	Philippines	7.3
Thailand	15.6	Brunei	7.1
China	15.4	Cambodia	6.8
Malaysia	9.1	Lao People's Democratic Republic	6.1
India	8.9		
Indonesia*	8.1		

*The Indonesian Family Life Survey is not specific to the ageing population but covers a wide range of ages.

Source: Saito (2018), Teerawichitchainan and Knodel (2015), UNDESA Population Division (2017).

The Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is expected to establish baseline data and succeeding data on OPs. Data from the LSAHV will allow a comparison between Viet Nam and other ASEAN and ageing societies to gain understanding on health status of OPs. Comparing ageing studies will help each country learn about the successes and failures of policies and programmes for OPs (Smith, 2012).

Outline of the Report

The LSAHV collected vibrant, multidisciplinary data from interviews with multiple actors, including OPs and their caregivers, children, and household members. The household members were usually responsible adults, often household heads. Based on the survey, this report provides an updated description of OPs, especially their health and well-being. All data presented in this report are from the perspective of OPs and their caregivers and children. The analyses were conducted on the various dimensions of health and well-being with respect to age and sex of OPs. Age is a critical factor because it is the primary driver of biological maturation, whilst a person's sex has been considered a source of significant variation amongst major demographic processes such as mortality (Lutz et al., 2014).

The LSAHV and the Longitudinal Study of Ageing and Health in the Philippines (LSAHP) are funded by the Economic Research Institute for ASEAN and East Asia. The format and, to some extent, content of the Viet Nam report are similar to the LSAHP baseline report (Cruz et al., 2019). The study design details are in chapter 2.

The report has 14 chapters on core issues in population ageing. Each ends with a summary of findings, discussion, and policy recommendations. The detailed sampling design and procedure, and a description of the proxy respondents are in Annexes A and B.

Chapter 1 provides the background of the study followed by Chapter 2 which describes the baseline survey design, field data collection, data management and analysis, limitation of the LSAHV, and an outline of further steps in the longitudinal study. Chapter 3 discusses the demography of ageing in Viet Nam, the characteristics of OPs, their household composition, and information about their family.

The next three chapters focus on health. Chapter 4 deals with the dimensions of general health: self-assessed health, diagnosed illnesses, oral health, sleep, the experience of pain, falls, and lifestyle practices such as smoking and drinking. Chapter 5 focuses on multiple disability measures, including the Global Activity Limitation Index (GALI), Washington Group's Short Set of Questions on Disability, Nagi functioning measures, activities of daily living, and instrumental activities of daily living. Chapter 6 covers healthcare and healthcare utilisation.

Chapter 7 presents findings on the OPs' economic status as measured using source of income, most important source of income, income level, assets and liabilities, and self-assessed economic well-being.

Chapter 8 provides information about OPs' generativity, attitudes, and beliefs. Chapter 9 tackles activities, social isolation, and use of information and communication technology; and introduces the essential components of OPs' well-being, including leisure activities they enjoy, their involvement in religious activities, and their membership in religious and other organisations.

Chapter 10 discusses OPs' knowledge of and access to privileges such as discounts for senior citizens and social pension schemes for indigent senior citizens. The chapter provides OPs' attitudes towards nursing home as well.

Chapter 11 explores family support as indicated by intergenerational exchanges of financial, emotional, and material support. The chapter examines the OPs' social contact with co-resident and non-co-resident children and their level of satisfaction with the contact and support derived from their children. The chapter discusses OPs' attitudes towards reliance on children for financial support.

Chapter 12 explores the level and nature of informal care provision for OPs. The chapter provides details on the profile of caregivers, their relationship and living arrangement with the OPs, their self-assessed health, and their views on the difficulty of their roles as caregivers. The chapter discusses caregivers' assessment of OPs' functional health status and OPs' level of difficulty in performing activities of daily living.

Based on the Adult Child Questionnaire, chapter 13 examines OPs' children's relationship, living arrangements, and exchange of support with OPs; and provides

adult children's perception of their parents' health status and their attitudes and beliefs on the issues their parent respondents were asked about. The perspectives of the children and caregivers will be useful in cross-validating data collected from OPs on the same issues. Finally, chapter 14 discusses the main findings of the study and recommends policies and programme implication.

References

- Association of Southeast Asian Nations (ASEAN) (2015), 'Kuala Lumpur Declaration on Ageing: Empowering Older Persons in ASEAN', in 27th ASEAN Summit. Kuala Lumpur: ASEAN. https://www.asean.org/storage/images/2015/November/27th-summit/ASCC_documents/Kuala%20Lumpur%20Declaration%20on%20Ageing%20-%20Empowering%20Older%20Persons%20in%20ASEANAdopted.pdf (accessed 17 October 2019).
- ASEAN (2016), 'ASEAN Plus Three Statement on Active Ageing', in 19th ASEAN Plus Three Summit. Vientiane: ASEAN. <https://asean.org/storage/2016/09/Final-Draft-APT-Statement-on-Active-Ageing.pdf> (accessed 17 October 2019).
- Birren, J.E. and K.W. Schaie (eds.) (2001), *Handbook of the Psychology of Aging*, 5th edition. San Diego, CA: Academic Press.
- Commission on Population and Development Board Resolution Number 03, Series of 2019. Approving the Creation of an Inter-Agency Technical Working Group on Active and Healthy Ageing and Development (IATWG on AHAD), and for Other Purposes.
- Congress of Viet Nam (2009), *Luật Người Cao Tuổi* [The Law on the Elderly]. Law No. 39/2009/QH12.
- Crimmins, E.M. and T. Seeman (2000), 'Integrating Biology into Demographic Research on Health and Aging', in C. E. Finch, J. W. Vaupel, and K. Kinsella (eds.) *Cells and Surveys: Should Biological Measures Be Included in Social Science Research?* Washington, DC: National Academy Press, pp.9–41.
- Cruz, G.T., C.J.P. Cruz, and Y. Saito (eds.) (2019), *Ageing and Health in the Philippines*. Jakarta: Economic Research Institute for ASEAN and East Asia.
- Dumpit, K. (2019). *Talking Points on the Work of NHRIs and GANHRI WG on Ageing*. Presentation. New York City, USA.
- Fozard, J.L., E.J. Metter, and L.J. Brant (1990), 'Next steps in Describing Aging and Disease in Longitudinal Studies', *Journal of Gerontology*, 45(4), pp.116–27.

- Government of Viet Nam (2011), Decree about Detailing and Guiding a Number of Articles of the Law on the Elderly. Decree No. 06/2011/NĐ-CP.
- Lutz, W., W.P. Butz, and S. KC (2014), *World Population & Human Capital in the Twenty-first Century: Executive Summary*. Laxenburg, Austria: International Institute for Applied Systems Analysis.
- Ministry of Health (Viet Nam) (2011), *Hướng dẫn thực hiện chăm sóc sức khỏe người cao tuổi* [Circular on Implementation of Healthcare for the Elderly]. Circular No. 35/2011/TT-BYT.
- Ministry of Health (Viet Nam) (2018), *Thành lập khoa Lão và chăm sóc sức khỏe cho người cao tuổi* [Official Letter on Establishment of Geriatrics Departments and Health Care for the Elderly]. Official Letter No. 2248/BYT-KCB.
- National Academies of Sciences, Engineering, and Medicine (2018), *Future Directions for the Demography of Aging: Proceedings of a Workshop*. Washington, DC: The National Academies Press. doi:10.17226/25064 (accessed 17 October 2019).
- Newsom, J.T., R.N. Jones, and S.M. Hofer (eds.) (2011), *Longitudinal Data Analysis: A Practical Guide for Researchers in Aging, Health, and Social Sciences*. New York: Routledge.
- Panel Study of Income Dynamics (PSID) (n.d.), Retrieved from the PSID website: <https://psidonline.isr.umich.edu/> (accessed 17 October 2019).
- Saito, Y. (2018), Intercountry Longitudinal Study on Aging and Health. Presentation. First Longitudinal Study of Aging and Health in the Philippines (LSHAP) Advisory Council meeting, Quezon City, Philippines, 20 July.
- Smith, J.P. (2012), 'Preparing for Population Ageing in Asia: Strengthening the Infrastructure for Science and Policy', in J. P. Smith and M. Majmundar (eds.) *Ageing in Asia: Findings from New and Emerging Data Initiatives*. Washington, DC: National Academy Press, pp.17–35.
- Stanziano, D.C., M. Whitehurst, P. Graham, and B.A. Roos (2010), 'A Review of Selected Longitudinal Studies on Aging: Past Findings and Future Directions', *Journal of the American Geriatrics Society*, 58 Suppl 2, pp.S292–7.
- Teerawichitchainan, B. and J. Knodel (2015), Data Mapping on Ageing in Asia and the Pacific: Analytical Report. <http://ageingasia.org/data-mapping/> (accessed 17 October 2019).
- The Prime Minister (Viet Nam) (2012), National Action Plan for the Elderly in Vietnam from 2012 to 2020. Decision No. 1781/QĐ-TTg.

Tran T.B.N., G.A. Barysheva, and L.S. Shpekht (2018), 'The Care of Elderly People in Vietnam', The European Proceedings of Social and Behavioural Sciences, eISSN: 2357-1330.

United Nations (2002), 'Political Declaration and Madrid Plan of Action on Ageing', in Second World Assembly on Ageing. Madrid: United Nations. <https://www.un.org/esa/socdev/documents/ageing/MIPAA/political-declaration-en.pdf> (accessed 17 October 2019)

United Nations Department of Economic and Social Affairs (UNDESA), Population Division (2017). <https://population.un.org/wpp/> (accessed 20 September 2019).

Vietnam Women Union (VWU) (2012). *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Women Publishing House.

The 2018 Longitudinal Study of Ageing and Health in Viet Nam

Nguyen Cong Vu, Mai Thi Tran, Linh Thuy Dang, and Grace T. Cruz

The purpose of conducting the 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is to (i) investigate the health status and well-being of older persons (OPs) and their possible correlates, and (ii) assess the determinants of health status and transitions in health status and overall well-being. Before the LSAHV, the only nationally representative study on OPs was the 2011 Vietnam Aging Survey (VNAS 2011). However, the LSAHV is the first attempt to conduct a longitudinal study on ageing in Viet Nam and, unlike the VNAS 2011, focuses on OPs' health conditions. Thus, the LSAHV will provide a deeper understanding of ageing and health. The study captures emerging issues on health and morbidity as it collected anthropometric measurements such as height and weight, biomarkers such as blood pressure and peak flow, number of functioning teeth, appendicular segmental muscle mass, cognitive functioning, the Washington Group's Short Set of Questions on Disability, the Global Activity Limitation Indicator (GALI), and performance indicators such as gait speed and functional reach. These data will allow an interdisciplinary approach to the analysis of ageing, health, and well-being of OPs. Longitudinal data collected through the 2020 survey will provide a basis for assessing the risk factors related to old-age morbidity, mortality, the timing of the onset of diseases, and functional disability, particularly with respect to socioeconomic and demographic factors.

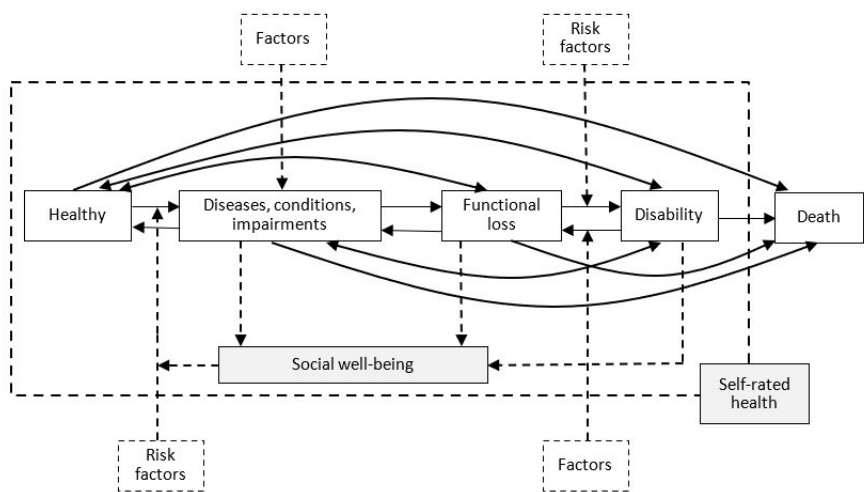
The 2018 LSAHV sheds light on related issues, including the intergenerational flow of wealth and support, the use of information technology, and the availability and nature of care support for OPs, which all directly affect their well-being. The scientific evidence based on information from the LSAHV will be useful for policymakers, health professionals, organisations providing services for OPs, and those working in gerontology and geriatrics.

The LSAHV is part of a comparative study of ageing and health in Viet Nam and the Philippines, two countries with almost similar population size but with different patterns and levels of population ageing and with no longitudinal data on ageing. Both surveys are funded by the Economic Research Institute for ASEAN and East Asia (ERIA). The Institute of Population, Health and Development (PHAD) is the implementing agency in Viet Nam.

Conceptual Framework

The LSAHV follows the same conceptual framework and design as the Longitudinal Study of Ageing and Health in the Philippines. The model of health status and health transitions based on the disablement process is presented in Figure 2.1. The World Health Organization (WHO, 2006) adopts a multifaceted concept of health that includes physical, mental, and social aspects. Based on this definition, the concept of healthy ageing in this study is not just the absence of disease but also, more importantly, the maintenance of functional ability. The model demonstrates the mutual relationships and transitions amongst the parameters from health to the end of life (Crimmins and Seeman, 2001; Saito et al., 2014; Verbrugge and Jette, 1994).

Figure 2.1. Conceptual Model of Health States and Health Transitions according to the Disablement Process



Source: Saito, et al. (2014).

The model goes beyond the traditional mortality and morbidity measures and extends the definition of health outcomes to encompass impairment, functional limitation, and disability. These outcomes help improve the understanding of the multidimensional aspects of health and the mechanisms through which health is affected (Verbrugge and Jette, 1994). In the disablement process, chronic and acute conditions affect functioning of specific body systems, fundamental physical and mental actions, and activities of daily living (ADLs). Other health domains such as mental health and cognitive functioning are considered in many regular demographic studies (Colsher and Wallace, 1991; Herzog and Wallace, 1997).

Five dimensions of the disablement process are (i) health; (ii) diseases, conditions, and impairment; (iii) functional loss; (iv) disability; and (v) death. WHO (2001) defines these dimensions as follows:

- (1) Impairment is the loss of physiological integrity in a body function or anatomical integrity in a body structure caused by disease, injury, or congenital defect. Thus, the survey includes a set of questions on chronic diseases and conditions, pain, falls, depression, and cognitive impairment as measures of diseases, conditions, and impairment.
- (2) Disability is not only physiological impairment and loss of functioning but also loss of individuals' ability to interact with others and with their environment. The definition is from the social-relational model and the biopsychosocial model (Washington Group on Disability Statistics, 2017). In this study, therefore, disability is measured by the following factors: ADLs, instrumental activities of daily living (IADLs), the Washington Group Short Set of Questions on Disability, and the General Activity Limitation Indicator.
- (3) Function loss or limitation refers to restrictions on performing fundamental physical and mental actions used in daily life by one's age and sex group that indicate the overall abilities of the body and mind to do purposeful 'work' (Verbrugge and Jette, 1994). This study used Nagi measurements to estimate functional loss.
- (4) Death is traditionally used as an indicator of population health: mortality or life expectancy. The indicator is computed based on age-specific mortality rates. Information on death will be recorded only in the 2020 survey.

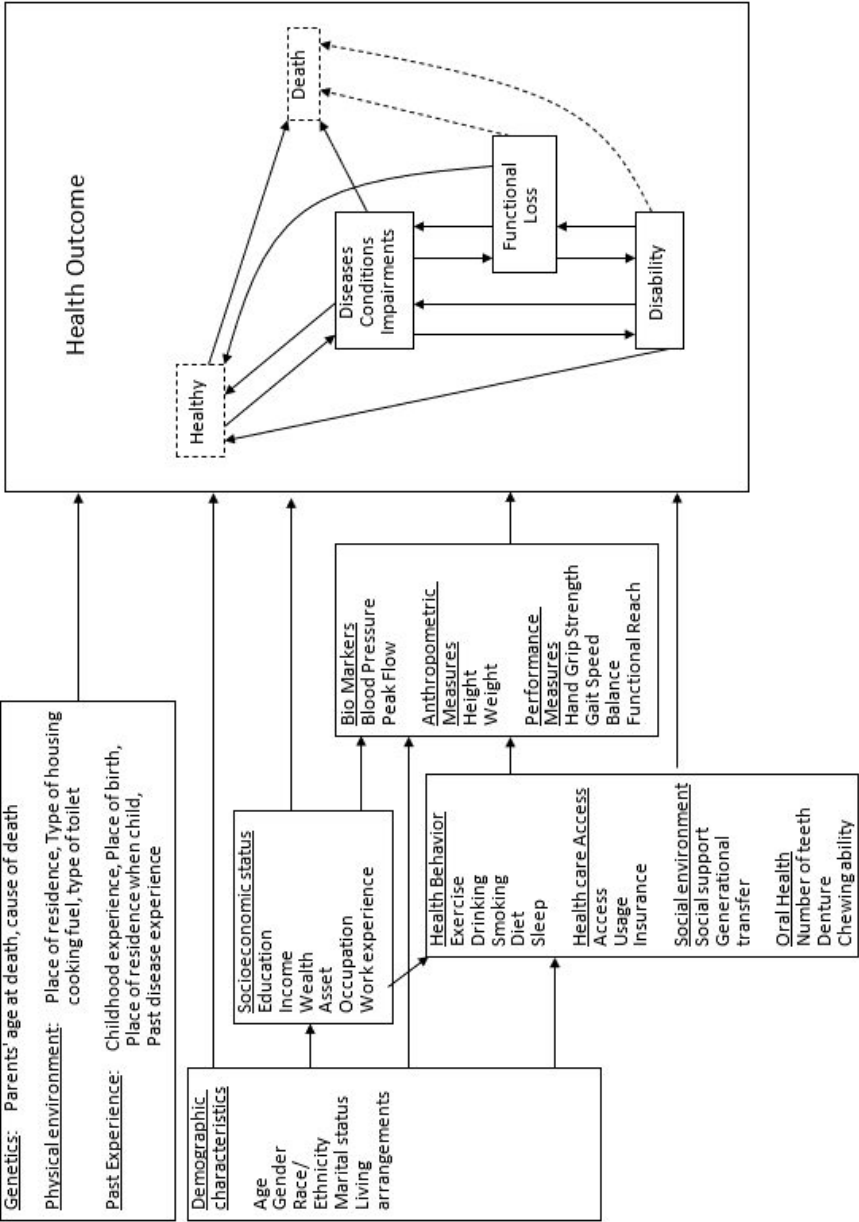
Health status and health-related questions were included in the survey. At baseline, respondents were asked to rate their own health as a global health measure. Then, they were asked about other social aspects of health, such as loneliness and happiness.

We examine health transition. The five dimensions are presented in Figure 2.1. Each box represents prevalence and each arrow represents transition or incidence. There are two sources of change in prevalence. For instance, the prevalence of functional loss may increase through decline of health outflow even though the transition to disability inflow stays constant. The prevalence of functional loss could increase the risk of death. Thus, we need to pay attention not only to the prevalence in each dimension but also to the health transitions amongst the dimensions.

Health transitions are determined in certain health states by the risk factors of health transitions amongst these states, including social, psychological, and environmental factors. They can speed up or slow down the pathway (Verbrugge and Jette, 1994) and influence or modify the process of becoming disabled (Peek et al., 2003). The relationship of these factors to health outcomes is presented in Figure 2.2. Health outcomes in this conceptual framework assume the same meaning as health outcomes in Figure 2.1. Health outcomes are influenced by different factors and the arrows suggest the transitions between these sets of factors. The concepts in each box are explored in the survey.

Health status and overall well-being are affected directly by demographic characteristics such as age; sex; marital status; the OP's childhood experiences (type of community where the OP grew up); parental characteristics (whether parents are alive, age at death, cause of death, and educational attainment); and physical environment (place of residence and type of living conditions). Health outcomes are affected by socioeconomic status, health behaviours, healthcare access, oral health, and social environment. These factors, in turn, are affected by demographic and socioeconomic factors. The last box presents biological risk factors such as blood pressure, body mass index, and grip strength, which have a direct effect on health status and are affected by sociodemographic and other health behaviours.

Figure 2.2. Conceptual Framework for Factors Related to Health Outcome



Source: Saito (2018).

Study Design

Follow-up interviews are scheduled 2 years after the baseline study. For respondents who have died since then, verbal autopsy data will be collected as a basis for estimating mortality rates and their determinants. To ensure that there will be enough respondents for succeeding surveys, the baseline survey oversampled those aged 70–79 with a factor of two and those aged 80 and above with a factor of three. Respondents were interviewed using a tablet.

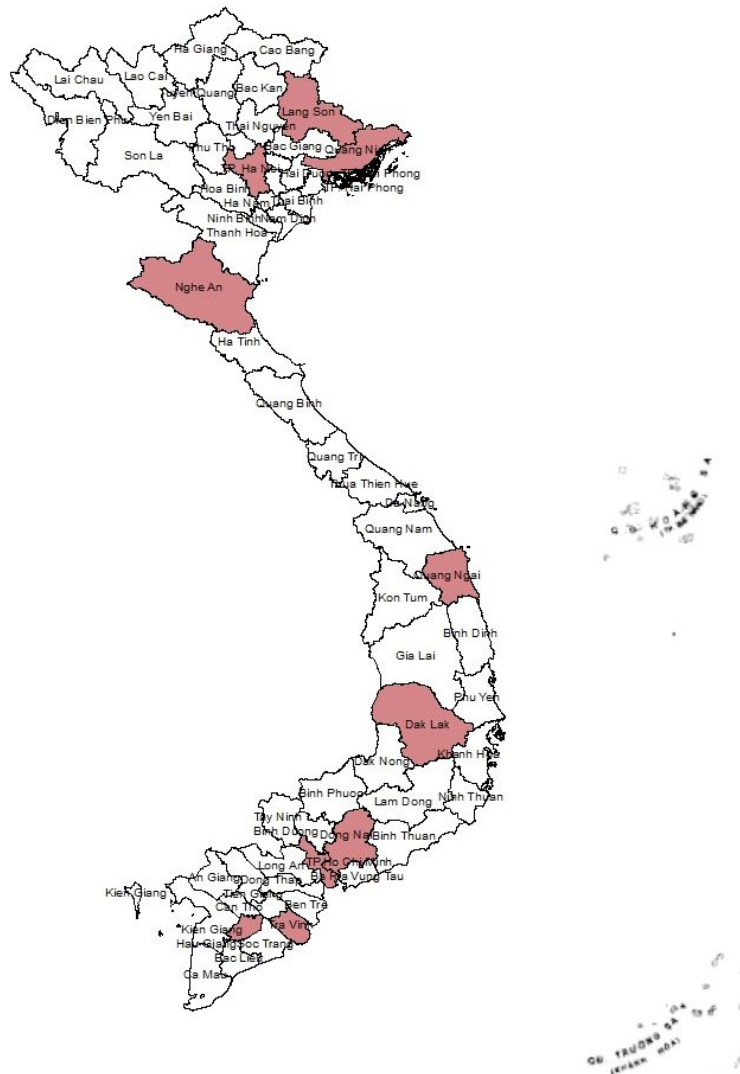
Working closely with the General Statistics Office and the General Office for Population and Family Planning, baseline data collectors employed a multistage sampling design. Provinces are considered the primary sampling units, villages the secondary sampling units, and OPs the ultimate sampling units. Based on the census of 2009, which is the latest, provinces were stratified by estimated population aged 60 and over in 2018. Data were collected in 654 villages from 10 provinces in 6 regions. The chosen provinces are marked in dark colour in Figure 2.3 and listed in Table 2.1 (see the Annex A for a full discussion of the sampling design).

Table 2.1. Sample Areas of the 2018 Longitudinal Study of Ageing and Health in Viet Nam

Province	Region	Number of Villages	Number of Eligible Older Persons Visited	Number of Older Persons Interviewed
TOTAL		654	6,050	6,050
Lang Son	Northern Midlands and Mountains	74	666	666
Quang Ninh	Red River Delta	99	891	891
Nghe An	North Central and Central Coast	76	684	684
Quang Ngai		34	306	306
Dak Lak	Central Highlands	46	414	414
Dong Nai	South East	60	540	540
Tra Vinh	Mekong River Delta	58	522	522
Hau Giang		43	387	387
Ha Noi	Red River Delta (Capital)	82	820	820
Ho Chi Minh City	South East (commercial centre)	82	820	820

Source: Calculated by PHAD using original LSAHV data.

Figure 2.3. The 2018 Longitudinal Study of Ageing and Health in Viet Nam: Sample Areas



Cartography: Nguyen Thi Yen, PHAD.

The LSAHV is designed to provide multilevel and multi-actor data. It covers not only OPs but also their household, primary or potential caregiver, and adult child. The child and caregiver respondents were at least 18 years old at the time of the interview. Data from them help cross-validate some information collected from the OPs, particularly on their health, caregiving, and intergenerational support.

The baseline data collection used five questionnaires:

- (1) Household questionnaire
- (2) Main questionnaire for the OP
- (3) Anthropometric questionnaire for the OP
- (4) Questionnaire for the OP's caregiver
- (5) Questionnaire for the OP's child

The questionnaires were translated into Vietnamese from the English versions used by the study in the Philippines. The Vietnamese study team adapted some questionnaires to local culture and contexts. The questionnaires' content was examined by the LSAHV advisory committee, composed of representatives from the academe, government agencies involved in ageing affairs, international development agencies, and nongovernment agencies.

Each questionnaire is described below:

(1) **Household questionnaire.** Aims to collect detailed demographic and economic information on household members, marital status, education, employment, household assets, access to clean water and sanitation, electricity availability, toilet facility, hunger experienced in the last 3 months, and the OP's children.

(2) **Main questionnaire for the OP.** Explores the health outcome measures and their determinants (Figure 2.2) and other measures of well-being. Provides a significant amount of information on the OP's health, such as self-assessed health; illnesses; functional ability (ADLs, IADLs, and Nagi); mental health (Center for Epidemiological Studies Depression Scale) and cognition; incontinence; personal habits such as smoking and drinking; and health utilisation.

The main questionnaire collected the following:

- Socioeconomic and demographic characteristics
- Health status
- Physical ability and disability
- Mental health
- Healthcare utilisation
- Income and assets
- Attitudes and beliefs
- Activities, social isolation, and information technology
- Services for OPs
- Children and grandchildren
- Consent for anchor child and caregiver
- Cognitive assessment

(3) **Anthropometric questionnaire.** Provides information for an interdisciplinary assessment of health outcomes. The assessment was done by integrating biomarkers and other physiological indicators in the demographic analysis of health outcomes. Data were collected on biomarkers (blood pressure and peak flow); anthropometric measures (height and weight); and performance measures (handgrip strength, gait speed, balance, and functional reach). The survey used the Tanita Segmental Body Composition Monitor to gather information on body weight, body mass index, body fat percentage, total body water percentage, muscle mass, physique rating, bone mass, basal metabolic rate, and visceral fat.

(4) **Caregiver questionnaire.** Based on a caregiver–older adult dyad survey conducted in Singapore, to provide information on the prevalence and nature of caregiving, including relationship of the caregiver to the care recipient, preparation for caregiving, caregiving activities, number of hours allotted for caregiving, well-being of caregivers, and support network and intervention programmes for caregivers. The survey collected information on the caregiver’s assessment of the OP’s difficulty in performing ADLs, which can be used to cross-validate the OP’s self-assessment.

(5) **Adult Child questionnaire.** Developed based on a parent–child dyad survey in Taiwan, which was part of a longitudinal study for OPs, and on a three-generation survey conducted in the United States. The questionnaire for Viet Nam examined the relationship between the adult child and the OP.

The data on parent–child dyads show the nature of intergenerational relationships, support provision, and expectations of filial piety.

The caregiver and adult child interviews also aim to provide more information on the potential consequences of changes in the OP's health status. The interviews aim to shed light on how the family is mobilised to provide support and services for their elder members. The questionnaire gathered basic socio-demographic data on the caregiver and adult child and their perception of the OP's health status. Additional contact information of the OP was gathered from the interviews with the caregiver and adult child. The information increases the chance of tracking OPs in the follow-up study in 2020.

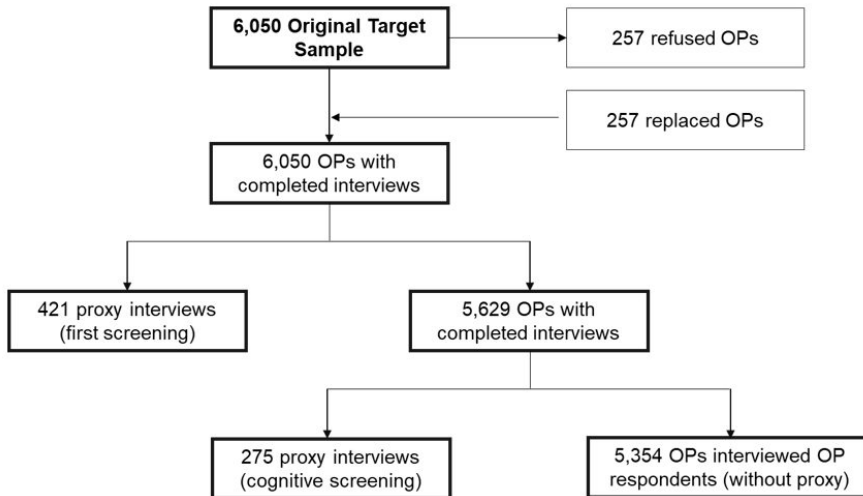
Study Sample

The baseline data were collected from a target sample of 6,050 OPs aged 60 and over. A total of 5,793 were interviewed from December 2018 to May 2019, for a response rate of 96%: 257 OPs either refused to participate or were not available for interview despite repeated visits (Figure 2.4) and were replaced; 421 OPs with difficulty hearing and/or speaking or with psychological disorders were interviewed by proxy; and 5,629 OPs were given a cognitive test to determine their ability to answer the questionnaire. The test used the Short Portable Mental Status Questionnaire for cognitive screening. Because the test has not yet been validated in Viet Nam, the standard cut-off scores recommended by Pfeiffer (1975) were adopted. In the standard score system, the cut-off score is determined by the OP's highest educational attainment.¹ The LSAHV is the first study in Viet Nam to use a cognitive assessment test to determine the OP's eligibility and fitness to answer the questions. After the screening, 5,354 OP scored above the cut-off. They were thus eligible to proceed with the interview. For the 275 OPs with lower cut-off scores, a proxy was allowed to answer factual questions.

¹ Pfeiffer (1975) adopted the following criteria for cognitive assessment: 0–2 errors = normal mental functioning, 3–4 errors = mild cognitive impairment, 5–7 errors = moderate cognitive impairment, 8 or more errors = severe cognitive impairment. One more error is allowed in the scoring if a respondent has had a grade school education or less. One less error is allowed if the respondent has had education beyond high school. To be eligible for the LSAHV interview, an OP with an elementary education or less should have five incorrect answers or less. An OP with a high school education should have four incorrect answers or less, while an OP with a college education or higher should have three incorrect answers or less to be eligible for interview.

Table 2.2 shows that 5,782 respondents (96% of the total respondents) were interviewed to collect anthropometric data. OPs who were bedridden, disabled, or sick and unable to perform the required measurements were excluded from the anthropometric measurements. The remaining 5,347 respondents (92% of the total respondents) were subjected to body mass and inner body scan using the Tanita Segmental Body Composition Monitor. For the caregiver and adult child survey, a total of 3,689 caregivers and 2,898 children were interviewed. The adult children who were also the caregivers were interviewed using the caregiver questionnaire instead of the adult child questionnaire.

Figure 2.4. Study Sample



Source: Calculated by PHAD using original LSAHV data.

Table 2.2. Number of Respondents per Questionnaire

Questionnaire	Number of Respondents
Household	6,050
Main	6,050
Adult child	2,898
Caregiver	3,689
Anthropometric	5,782
With Tanita measures	5,347
Without Tanita measures	435

Source: Calculated by PHAD using original LSAHV data.

Training of Field Personnel

The LSAHV team conducted a training session for field supervisors and field interviewers in each study province. They were local people who understood the local culture, languages, and locations. The training session included a review of the duties and responsibilities of field personnel, clarification of the concepts and questions used in the five questionnaires, an explanation of how to conduct the performance tests and measures in the anthropometric questionnaire, and mock interviews using computer-assisted personal interview versions of the questionnaires with the participation of OPs who were not in the list of selected villages. A field manual was developed and distributed to all field personnel during the training.

Fieldwork

The survey data were collected from 14 December 2018 to 30 May 2019. Each province had a team including one supervisor from PHAD, provincial supervisors, and field interviewers. The PHAD supervisor was present throughout the fieldwork to monitor data collection and help the data collectors answer all questions arising in the fieldwork. Provincial supervisors were responsible for field supervision.

Data Processing

The program – REDCap, a secure application for conducting surveys created in 2004 at Vanderbilt University, United States – was used for data collection. Field interviewers were requested to transfer data to the server using 4G or Wi-Fi by the end of the day. The data files were regularly checked by the PHAD supervisor.

The raw data were exported from the REDCap server into an Excel format and then converted into Stata 16 for data cleaning and analysis.

In this report, the number of cares in the tables is the interviewed number of cases but the percentages are based on weighted numbers of OPs.

Ethics in Research

Researching emotional status was given special consideration to ensure that subjects were protected under the regulations of international research ethics. The implementation process of the LSAHV was carefully reviewed by the Institutional Review Board of the PHAD, which is under the authorisation of the American Medical Board, to minimise risks to the interviewees.

All interviewees and/or their legal representatives had to express consent to participate in the interviews. The interviews were conducted in private to ensure confidentiality and privacy.

The identities of all the participants interviewed and the recorded information on the questionnaires about their relatives and the data analysis were encrypted and kept confidential. As the data were collected digitally, all the final original data were secured in the encrypted server of PHAD and copies in the password-protected hard drive. The dataset to be used for data analysis and sharing has been anonymised, i.e. information on name, address, telephone, GPS locators, and date of birth were removed.

References

- Colsher, P.L. and R.B. Wallace (1991), 'Epidemiologic Considerations in Studies of Cognitive Function in the Elderly: Methodology and Nondementing Acquired Dysfunction', *Epidemiologic Reviews*, 13(1), pp.1–27. [doi:10.1093/oxfordjournals.epirev.a036065](https://doi.org/10.1093/oxfordjournals.epirev.a036065) (accessed 20 October 2019).
- Crimmins, E.M. and T. Seeman (2001), 'Integrating Biology into Demographic Research on Health and Aging (with a Focus on the MacArthur Study of Successful Aging)', in C.E. Finch, J.W. Vaupel, and K. Kinsella (eds.), *Cells and Surveys: Should Biological Measures Be included in Social Science Research?* Washington, DC: National Academy of Sciences, pp.9–41.
- Herzog, A.R. and R.B. Wallace (1997), 'Measures of Cognitive Functioning in the AHEAD Study', *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 52B(Special Issue), pp.37–48. [doi:10.1093/geronb/52b.special_issue.37](https://doi.org/10.1093/geronb/52b.special_issue.37) (accessed 20 October 2019).

- Peek, M.K., K.J. Ottenbacher, K.S. Markides, and G.V. Ostir (2003), 'Examining the Disablement Process among Older Mexican American Adults', *Social Science and Medicine*, 57(3), pp.413–25.
- Pfeiffer, E. (1975), 'A Short Portable Mental Status Questionnaire for the Assessment of Organic Brain Deficit in Elderly Patients', *Journal of American Geriatrics Society*, 23(10), pp.433–41.
- Saito, Y. (2018), Two-Country Aging Research Survey Project Proposal submitted to ERIA.
- Saito, Y., J. Robine, and E.M. Crimmins (2014), 'The Methods and Materials of Health Expectancy', *Statistical Journal of the IAOS*, 30(3), pp.209–23. doi:10.3233/SJI-140840 (accessed 20 October 2019).
- Verbrugge, L.M. and A.M. Jette (1994), 'The Disablement Process', *Social Science and Medicine*, 38(1), pp.1–14. doi:10.1016/0277-9536(94)90294-1 (accessed 20 October 2019).
- Vietnam Women Union (VWU) (2012), *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Women Publishing House.
- Washington Group on Disability Statistics (2017), The Washington Group Short Set on Functioning (WG-SS). <http://www.washingtongroup-disability.com> (accessed 20 October 2019).
- World Health Organization (2001), *International Classification of Functioning, Disability and Health: Short Version*. Geneva, Switzerland: World Health Organization.
- World Health Organization (2006), *Constitution of the World Health Organization. Basic Documents*. 45th edition, Supplement. https://www.who.int/governance/eb/who_constitution_en.pdf (accessed 20 October 2019).

Vietnamese Older Persons

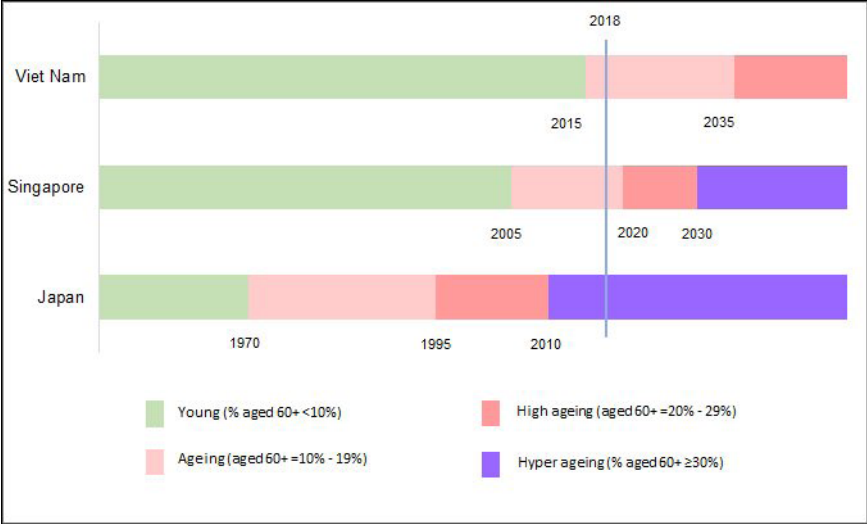
Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

Population ageing is one of the most significant developments and important demographic trends of the 21st century, affecting labour and financial markets; demand for goods and services such as housing, transportation, and social protection; and family structures and intergenerational ties. Population ageing is specifically relevant to the Sustainable Development Goals (SDGs) on poverty eradication, healthcare, and gender equality (UNDESA Population Division, 2015a). Preparing for the economic and social shifts associated with an ageing population is, therefore, essential.

The global trends on ageing are confirmed by regular demographic structural changes in some Asian countries such as Japan, Singapore, and Viet Nam (Figure 3.1). Whilst Japan's population has been ageing since 1970 and hyper-ageing since 2010, Singapore turned into high-ageing country in 2020 and Viet Nam is ageing and expects to become high-ageing country after 2035. The number of older persons (OPs) in Viet Nam increased from 4 million (6.9% of the total population) in 1979 to 10.35 million (11.3%) in 2015 (Hoang and Duong, 2018). OPs are expected to surpass 18.6 million (17.5%) by 2030 and 32 million (28%) by 2050 (UNDESA Population Division, 2017).

This chapter presents the overall picture of OPs from the 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) baseline data: characteristics of OPs' households, housing, household amenities, and transportation; and OPs' characteristics, living arrangements, and family networks.

Figure 3.1. Status of Ageing: Viet Nam, Singapore, and Japan, 1950–2045



Data source: UNDESA, Population Division (2019).

Household Population and Housing Characteristics

A household questionnaire was used to gather information on OPs’ household composition and basic socio-demographic characteristics, housing amenities, poverty indicators, and family networks. Table 3.1 shows that the 6,050 sample person’s households have a total of 23,409 members. Each household has at least one OP. The sample person’s households have an average age of 46 years, which is higher than the national average (31 years) (www.danso.org). The sample person’s household average size is 3.9 members, which is slightly higher than the national average of 3.6 (Central Population and Housing Census Steering Committee, 2019). The proportion of households headed by males (84%) is much higher than that headed by females (16%).

The experience of hunger was used as a proxy measure of poverty. A small proportion of households experienced hunger in the 3 months before the survey (0.9%); amongst them, almost a fifth (15.3%) experienced severe hunger (i.e. experienced hunger often or always for the period covered).

Table 3.1. Household and Housing Characteristics

A. Household characteristics		Mean /%
Mean age of household members		
Males		43.23
Females		48.02
Both sexes		46.22
<i>N of cases</i>		23,409
Mean household size		3.87
<i>N of cases</i>		6,050
Households headed by males		84.0
Households headed by females		16.0
Households with an overseas worker		0.5
Households that experienced hunger in the last 3 months		0.9
<i>N of cases</i>		6,050
Frequency of hunger		
Only once		12.2
A few times		72.5
Often		14.0
Always		1.3
<i>N of cases</i>		52
B. Housing characteristics		%
Own house and lot		84.6
In dwellings with roof made of strong materials		97.2
In dwellings with floors made of cement/marble/ceramic tiles		91.9
In dwellings with walls made of concrete/brick/stone		91.6
With electricity		99.0
Main source of drinking water		
Indoor tap water		44.2
Public tap water		3.8
Drilled well		21.9
Protected dig well		4.5
Unprotected dig well		13.6
Protected slot water		1.6
Unprotected slot water		5.6
Rainwater		3.3
Protected spring water		0.6

Unprotected spring water	0.5
Others	0.4
Main source of water for other purposes such as cooking and hand washing	
Indoor tap water	43.1
Public tap water	3.7
Drilled well	23.4
Protected dig well	4.0
Unprotected dig well	14.8
Protected slot water	1.6
Unprotected slot water	5.3
Rainwater	2.2
Protected spring water	0.6
Unprotected spring water	0.6
Others	0.6
Type of toilet	
Flush toilet	50.2
Pit latrine	41.6
Other	8.2
Household amenities	
Aircon	28.9
Washing machine	46.6
Stove with oven/gas range	81.9
Refrigerator/freezer	73.3
Personal computer/laptop	13.8
Cellular phone/mobile phone	78.6
Landline/wireless telephone	7.3
Audio component/stereo set	7.5
Karaoke/videoke/Magic Sing	10.0
CD/VCD/DVD player	17.4
Television	86.4
Radio/radio cassette player	9.2
Internet access	27.0

Vehicles	
Motorized banca/boat	0.7
Car/jeep/van	4.0
Motorcycle/tricycle	57.2
<i>N of cases</i>	6,050

CD = compact disc, DVD = digital video disc, VCD = video compact disc.
Source: Calculated by the PHAD using original LSAHV data.

As for housing characteristics and amenities, 84.6% of households reported that they owned the house and lot they were living in. Most housing units are made of durable materials (97.2%); 91.9% have cement, marble, or ceramic tile floors; and 91.6% have walls made of permanent materials (concrete, brick, stone). About 1% do not have access to electricity.

In line with the SDG 6.2 – achieve access to adequate and equitable sanitation and hygiene for all and end open defecation by 2030 (United Nations, 2017) – the survey collected information on OP households’ main source of drinking water and toilet facilities. The primary source of drinking water is indoor tap water (44.2%). About a one in five said they get their drinking water from a drilled well and 4.5% from a protected dig well. A substantial percentage still rely on unsafe drinking water sources: unprotected dig well (13.6%), unprotected water slots (5.6%). Water for other purposes such as cooking and hand washing mainly comes from indoor tap water (43.1%), drilled wells (23.4%), unprotected dig wells (14.8%), and unprotected water slots (5.3%).

Only half the households (50.2%) have a flush toilet, although it is not clear whether it is shared with other households; 41.6% have a pit latrine. A considerable proportion of sanitation services are not properly managed and can spread diseases, provide a breeding ground for mosquitoes, and pollute groundwater and surface water that could be sources of drinking water (United Nations, 2017).

Data on household amenities are suggestive of households’ economic status. The most commonly owned appliances are television sets (86.4% of households), stoves with oven and gas range (81.9%), cellular phones (78.6%), refrigerators (73.3%), washing machines (46.6%), and internet access (27%). Generally, the most commonly owned modes of transport are motorcycles and/or tricycles (57.2%).

Characteristics of Older Persons

As in the general population, female OPs outnumber males, constituting 57.2% of the total OP sample. For every 100 females, there are 74.8 males (Table 3.2). The mean age is 70.6 years old, with not much difference between males (70.2) and females (70.8). More males, however, are married or living in (82.1%) than females (47.7%).

Table 3.2. Percent Distribution of Older Persons by Sex and Age

Characteristics	Mean /%
Sex	
Male	42.8
Female	57.2
Sex Ratio	74.8
Age	
60-69	58.5
70-79	24.6
80+	16.8
Mean age	
Male	70.24
Female	70.81
Both sexes	70.57
<i>N of cases</i>	6,050

Source: Calculated by the PHAD using original LSAHV data.

One of the most critical characteristics of OPs is their educational profile, which is relatively low. Elementary education is the modal educational attainment: 35.7% reported having at most an elementary education (32.7% for males, 38% for females) (Table 3.3); 22% received a secondary education; 20.8% have no schooling; and only 6.5% have a college education. Table 3.3 shows significant improvements in the level of education across age cohorts, especially in the proportion with at least some high school education, which improved from 3.6% amongst those aged 80+ to 11.4% amongst those aged 60–69, indicating that the educational profile is improving.

The education of OPs is related to their employment status. About one-third (33.8%) continue to be economically productive; the proportion is significantly higher amongst males and those in their 60s. Nearly two-fifths (38%) of males and close to one-third (30.7%) of females are engaged in economic activities (Table 3.3). A significant disparity exists in work status across age groups, with 47.0% of those aged 60–69, 19.9% of those aged 70–79, and only 8.4% of those aged 80 and over currently working.

Table 3.3. Sociodemographic Profile of Older Persons by Sex and Age

Sociodemographic Profile	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Marital status								
Currently married or living in	82.1	47.7	**	73.0	56.4	34.3	*	62.4
Other	17.9	52.3		27.0	43.6	65.7		37.6
Education								
No schooling/ Pre-school	12.6	27.1		14.8	24.7	39.9		20.8
Elementary school	32.7	38.0		33.6	37.8	41.1		35.7
Secondary school	27.6	18.3	*	27.3	17.0	10.4	**	22.4
High school	11.9	7.8		11.4	8.6	3.6		9.6
Vocational school	5.9	4.4		5.3	6.1	2.3		5.1
College or higher	9.3	4.3		7.6	5.9	2.7		6.5
Work status								
Currently working	38.0	30.7	n.s.	47.0	19.9	8.4	*	33.8
Not currently working	62.0	69.3		53.0	80.1	91.6		66.2
Religion								
None	69.9	66.4	n.s.	67.1	67.8	70.6	n.s.	67.9
Others	30.1	33.6		32.9	32.2	29.4		32.1
Place of residence								
Urban	32.7	33.3	n.s.	35.1	31.7	27.9	**	33.1
Rural	67.4	66.7		65.0	68.3	72.2		67.0
N of cases	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Living Arrangements and Residential History

Living arrangements impact OPs' health and well-being (Feng et al., 2019; Yamada and Teerawichitchainan, 2015; Zhang, 2019; Zhang, 2015). OPs' residential history is dynamic and dependent on a multitude of reasons, such as changes in their marital status, health, and economic well-being (Kasper et al., 2010; Liang et al., 2005; Martikainen et al., 2008). Because of significant changes in urbanisation and international migration, family norms and structures, and values, these factors must be examined to see how they affect OPs' living arrangements. The information will contribute to understanding OPs' well-being and/or vulnerability, and lead to better interventions.

Survey data show that the most common living arrangement is co-residence with children (Table 3.4): 61.3% of OPs co-reside with at least one child. This arrangement is more common amongst females than males (62.6% vs. 59.6%). Those in the oldest cohort are most likely to live with their children because of deteriorating health. About 19.4% live with their spouse only, with significantly more males (26.9%) than females (13.8%) doing so. A substantial proportion (10.7%) reported other types of living arrangements, including living with siblings, other relatives, or nonrelatives such as housemaids or caregivers. A considerable proportion live alone (8.6%). A high percentage of OPs live independently but 56.7% have children living in the same village. Functionally, males and females differ in their living arrangements: more females live alone but more than half (59.5%) have children who live close by. This means that only 3.7% of OPs live alone without any child living in their neighbourhood.

Residential history should be considered. How mobile are the OPs? About 40.5% have never moved out of their place of birth. This is more common amongst females than males (48.5% vs. 34.1%) and amongst OPs aged 70–79 (46.5%). Only 3.1% moved to their current residence in the previous 5 years. Slightly more females than males reported doing so (3.5% vs. 2.7%). Most OPs claimed to have settled in their current residence for at least 5 years (54.7%). OPs not residing in their birthplace have been living in their current residence for 47.2 years on average, indicating relative stability in residence during old age. Only 1.6% said they had moved into their current residence within a year before the survey. The OPs' aversion to residential change is evident in the finding that only 0.9% expressed an intention to migrate in the next 2 years. Given a choice, most OPs (61.1%) would prefer to live in the countryside (Table 3.4).

Table 3.4. Living Arrangement and Residential History by Sex and Age

Living Arrangement and Residential History	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Living arrangement								
Living alone	4.4	11.6	***	6.8	10.5	12.0	n.s.	8.6
Living with spouse only	26.9	13.8		20.2	21.1	14.2		19.4
Living with at least 1 child (exclude child-in-law)	59.6	62.6		60.9	60.4	64.0		61.3
Other types of arrangement	9.1	12.0		12.2	8.0	9.8		10.7
N of cases	2,570	3,480		2,638	2,004	1,408		6,050
Those living alone (exclude OPs with no children)								
Without children living in the same village	52.8	40.5	n.s.	51.5	39.4	33.2	n.s	43.3
With children living in the same village	47.2	59.5		48.5	60.6	66.8		56.7
N of cases	112	311		143	151	129		423
Residential history								
Number of years lived in current residence								
Since birth	48.5	34.1	n.s.	39.3	39.9	46.5	n.s.	40.5
Less than 1 year	1.0	2.2		1.7	1.5	1.7		1.6
Within the last 5 years	2.7	3.5		3.2	3.5	2.2		3.1
More than 5 years	47.8	60.3		55.8	55.1	49.7		54.7
N of cases	2,135	2,662		2,196	1,570	1,031		4,797
Mean years lived in current residence	49.67	45.14	n.s.	43.03	48.83	60.79	*	47.17
N of cases	2,135	2,662		2,196	1,570	1,031		4,797
% with intention to migrate within the next two years	1.1	0.8	n.s.	1.1	0.7	0.8	n.s.	0.9
Ideal type of place OP wants to live in								
City	24.5	24.8	n.s.	27.4	22.8	17.7	n.s.	24.7
Town	7.6	7.0		7.7	7.4	5.4		7.3
Rural	61.6	60.7		58.1	64.0	67.4		61.1
Abroad	0.6	0.6		0.8	0.6	0.06		0.6
Don't know	5.7	6.9		6.0	5.3	9.5		6.4
N of cases	2,543	3,452		2,614	1,984	1,397		5,995

Sig = Statistical significance, * $p < 0.05$, *** $p < 0.001$, n.s. = not significant

Source: Calculated by PHAD using original LSAHV data.

Older Persons and Their Families

OPs have important roles as leaders, teachers, and emotional and spiritual guides in the family network, which includes parents, siblings, spouses, children, and grandchildren who assist OPs and share resources with them. Kinship obligations are relevant to OPs' well-being. This section presents the characteristics of OPs' family networks and provides information about their size and quality.

Amongst OPs, 11.8% of them have a surviving parent. Because women live longer than men, 9.5% of OPs have surviving mothers and only 3.6% have surviving fathers (Table 3.5). The difference is significant across ages: more OPs aged 60–69 reported that their mother was still alive (14.7%) but only 0.4% of the older ones did.

Table 3.5. Characteristics of Parents and Siblings by Sex and Age

Characteristics of Parents and Siblings	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% with living parents								
Father	4.2	3.1	n.s.	5.5	1.1	0.4	*	3.6
Mother	11.1	8.4		14.7	3.6	0.4		9.5
<i>N of cases</i>	2,570	3,480		2,638	2,004	1,408		6,050
Highest educational attainment of father								
No schooling/ Pre-school	55.2	58.1	n.s.	54.0	60.0	62.5	n.s.	56.9
Elementary	20.3	13.4		19.5	13.6	9.3		16.4
High school	4.0	4.6		5.3	4.1	1.7		4.4
College or higher	1.0	0.6		1.0	0.5	0.5		0.8
Do not know	19.5	23.2		20.2	21.9	26.1		21.6
<i>N of cases</i>	2,567	3,473		2,636	1,999	1,405		6,040
Highest educational attainment of mother								
No schooling/ Pre-school	63.2	65.6	n.s.	61.8	68.9	67.8	n.s.	64.6
Elementary	17.0	11.6		17.7	9.7	7.1		13.9
High school	1.2	0.8		1.4	0.5	2.8		1.0
College or higher	0.3	0.0		0.2	0.1	0.0		0.2
Do not know	18.3	21.9		18.9	20.9	24.8		20.3
<i>N of cases</i>	2,567	3,469		2,631	2,000	1,405		6,036
Mean number of siblings	5.02	4.90	n.s.	5.20	4.59	4.57	n.s.	4.95
Mean number of living siblings								
All	3.80	3.61	n.s.	4.31	3.12	2.23	n.s.	3.70
Brothers	1.98	1.51	*	2.00	1.45	1.03	**	1.71
Sisters	1.82	2.11	n.s.	2.31	1.67	1.21	**	1.98
<i>N of cases</i>	2,327	3,070		2,443	1,782	1,172		5,397

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

The survey asked about the educational attainment of OPs' parents. About a fifth of OPs, however, did not know or could not remember their parents' level of education. More than a half reported that their father or mother had no formal schooling or preschool education, 16.4% said that their fathers had an elementary education while 13.9% reported for their mothers. The proportion of OPs who said that their father went beyond the elementary level were higher than that of mothers (5.2% and 1.2%, respectively). The generation that preceded the surveyed OPs clearly had a lower education profile than their children.

Because Viet Nam is a high-fertility regime, OPs unsurprisingly reported a mean number of five siblings, of whom about four are still alive and almost equally split by gender (3.8 for males and 3.6 for females) (Table 3.6).

Almost all (97%) the OPs have children: on average, 4.1 children ever born, reflecting the generation's high fertility, of whom about 4 are still living. Females reported a slightly higher average number of children ever born than males. The difference in number of children, by age group, is significant: 5.4 amongst OPs aged 80+ and 3.6 amongst those aged 60–69, reflecting the change in family structure. Childlessness is not common, with only 0.6% reporting that they have no child ever born. A relatively high proportion, however, experienced child mortality: almost one-fifth of OPs reported having at least one child who died.

Two percent of OPs have adopted children or stepchildren, with males and females having an average of 1.2 adopted children or stepchildren. Males have a slightly higher number of adopted children or stepchildren (1.3) than females (1.1).

Grandparenting is an almost universal experience: 9 in 10 reported having at least one grandchild from their biological children, stepchildren, and adopted children (Table 3.7), and a mean 2.8 grandchildren. On average, the OPs became grandparents at about 51.4 years old. Less than one-fifth (19.1%) are involved in the partial or full care of any of their grandchildren. Males and females reported being almost equally involved in the care of grandchildren (18.9% vs. 19.3%, respectively). Although the proportion expectedly decreases as OPs age, a notable proportion (8%) of those aged 80+ are actively involved in grandchild care.

Table 3.6. Children of Older Persons by Sex and Age

Living Arrangement and Residential History	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% of older persons who have children including adopted/stepchildren	98.5	95.9	n.s.	96.2	97.9	98.4	n.s.	97.0
<i>N of cases</i>	2,570	3,480		2,638	2,004	1,408		6,050
Mean children ever born	4.05	4.13	n.s.	3.55	4.46	5.39	**	4.09
Children ever born								
0	0.3	1.0		0.7	0.5	1.0		0.7
1	5.3	7.9		8.0	5.7	4.3		6.8
2	18.4	16.1	n.s.	22.5	10.5	7.9	**	17.0
3	21.6	19.4		24.4	18.0	9.9		20.3
4	20.3	18.3		18.3	24.0	15.0		19.2
5+	34.4	37.4		26.2	41.4	61.9		36.1
<i>N of cases</i>	2,530	3,325		2,520	1,952	1,383		5,855
Mean age at first child	26.96	24.75	*	25.29	26.33	26.32	n.s.	25.8
<i>N of cases</i>	2,298	3,002		2,331	1,779	1,190		5,300
Mean number of living children	3.91	3.92	n.s.	3.94	4.22	4.94	**	3.92
Number of living children								
0	0.4	0.8		0.3	1.4	0.7		0.6
1	6.0	9.3		8.9	6.7	6.1		7.9
2	19.1	17.0	n.s.	23.3	11.9	8.1	*	17.9
3	22.1	20.4		24.4	19.1	12.8		21.1
4	20.0	18.9		18.3	22.9	18.0		19.4
5+	32.5	33.6		24.8	38.0	54.4		33.1
<i>N of cases</i>	2,522	3,293		2,501	1,941	1,373		5,815
Mean number of dead children (amongst those who experienced child mortality)	1.92	2.01	n.s.	2.21	1.87	1.78	n.s.	1.98
<i>N of cases</i>	357	719		267	379	430		1,076
Number of dead children								
0	86.2	79.7		88.0	78.9	69.0		82.5
1	8.6	12.2		6.5	14.0	19.5		10.6
2	1.9	3.5	n.s.	1.6	3.7	5.9	n.s.	2.8
3	2.0	2.4		2.4	1.2	3.0		2.2
4	0.4	0.9		0.4	0.1	0.9		0.7
5+	0.9	1.4		1.0	1.3	1.7		1.2
<i>N of cases</i>	2,521	3,291		2,498	1,941	1,378		5,812
% who have adopted or stepchildren	2.0	2.0	n.s.	1.9	1.9	2.6	n.s.	2.0
<i>N of cases</i>	2,487	3,391		2,558	1,959	1,361		5,878
Amongst those who have adopted or stepchildren, mean number of living adopted or step children	1.29	1.14	n.s.	1.15	1.31	1.20	n.s.	1.19
<i>N of cases</i>	22	51		32	21	20		73
Amongst those who have adopted or stepchildren, mean number of dead children (amongst those who experienced child mortality)	1.00	1.00	n.s.	1.00	1.00	1.00	n.s.	1.00
<i>N of cases</i>	2	5		2	4	1		7

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

The OPs take grandparenting seriously: 70.6% of those who reported taking care of their grandchildren either fully or partially are co-residing with their grandchildren, with no significant difference across sex and age. At least 21.8% are solely responsible for the care of the grandchild. This proportion is almost the same for females and males (22.1% vs. 21.4%).

The common reasons for being solely in charge of any grandchild are that the child's mother or father or both work in another city or province (47.9%), the child's parents are separated (11%), the child's mother or father or both work abroad (4.1%), or the child prefers to live with the OP rather than with his or her own parents (7.7%).

Table 3.7. Grandchildren of Older Persons by Sex and Age

Information on Grandchildren	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who have any grandchildren from own, step and adopted children	90.0	91.9	n.s.	88.7	94.5	94.2	*	91.1
<i>N of cases</i>	2,530	3,326		1,521	1,952	1,383		5,856
Mean age when older person first had biological grandchild	51.80	50.26	n.s.	49.99	52.19	52.29	n.s.	51.41
<i>N of cases</i>	1,690	2,159		1,669	1,360	820		3,849
% who take care of any of the grandchildren, either fully or partially	18.9	19.3	n.s.	23.1	18.2	7.9	*	19.1
<i>N of cases</i>	2,280	3,053		2,210	1,826	1,297		5,333
For older persons taking care of any grandchild:								
% who live with any grandchild	70.3	70.8	n.s.	72.6	65.6	69.0	n.s.	70.6
% who are solely in charge of taking care of any grandchild	21.4	22.1	n.s.	22.4	21.8	15.7	n.s.	21.8
<i>N of cases</i>	364	528		509	298	85		892
Reasons for being solely in charge								
Grandchild's parent is working abroad	7.1	1.8		4.9	2.5	0.0		4.1
Grandchild is orphaned	4.7	18.2		13.1	9.8	16.2		12.5
Grandchild prefers to live with older persons than with own parents	1.9	12.0		10.0	1.7	4.5		7.7
Mother/Father or both parents of grandchild is working outside the town/city but within Viet Nam	56.4	41.7	n.s.	52.7	40.0	18.6	n.s.	47.9
Grandchild's parents are separated	10.0	11.8		9.5	16.3	7.7		11.0
Grandchild's parents are not married	10.4	2.5		3.7	3.7	44.4		5.8
Other	9.5	12.0		6.1	26.1	8.6		11.0
<i>N of cases</i>	77	102		104	60	15		179

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Summary, Conclusions, and Recommendations

This chapter discusses the characteristics of OPs' households, housing, and household amenities. The mean age of members of the household where OPs reside is higher than the national figure. The mean number of household members is slightly higher than the national figure. A tiny proportion of OP households have suffered from hunger. Few households have family members working overseas.

Almost 85% of OPs interviewed own the house and lot where they reside. The main sources of drinking water are indoor tap water (44.2%) and drilled well (21.9%). Yet, about 20% of OPs still get their drinking water from unsafe sources. Although about half of OP households have a flush toilet, 42% still use a pit latrine.

This chapter reports on the characteristics of the interviewed OPs: 43% are males with a mean age of 70.2 years and 57% are females with 70.8. The difference in marital status between males and females is significant: 82.1% vs. 47.7% are married or living in. Levels of education differ by gender, with females having lower levels of education in general. The place of residence does not differ by gender: about 33% of males and females live in urban areas.

Living arrangements are important factors in understanding the health status of OPs and provision for their care. More than 60% live with a spouse or child; the proportion living alone is only 4.4% for males and 11.6% for females. Even amongst those living alone, more than half have a child living in the same neighbourhood.

Living arrangements of OPs are closely related to their family structure. Few OPs have surviving parents but have 3.7 living siblings on average. OPs have 3.9 living children on average and less than 1% of OPs have no biological child. The mean number of living adopted children or stepchildren is 1.2.

Many aspects of OPs' lives need to be analysed further. Most OPs seem to live without hunger but some have severe economic difficulties. How do such living conditions affect OPs' health status and well-being? This needs to be explored.

On average, OPs have large social networks. How they affect OPs' mental and general health is explored in other studies (Takagi and Saito, forthcoming; Takagi and Saito, 2020; Tiedt et al., 2016; Takagi and Saito, 2015, 2013) and should be the focus of further analysis of the LSAHV data.

References

- Feng, Z., J. Falkingham, X. Liu, and A. Vlachantoni (2019), 'Changes in Living Arrangements and Mortality among Older People in China', *SSM Population Health*, 3, pp.9–19. doi:j.ssmph.2016.11.009 (accessed 30 November 2019).
- Feng, Z., K. Jones, and W. Wang (2015), 'An Exploratory Discrete-Time Multilevel Analysis of the Effect of Social Support on the Survival of Elderly People in China', *Social Science Medicine*, 130, pp.181–9.
- Central Population and Housing Census Steering Committee (2019), *Kết quả Tổng điều tra Dân số và Nhà ở thời điểm 0 giờ ngày 01 tháng 4 năm 2019*. [Results – the Viet Nam Population and Housing Census of 00:00 Hours on 1 April 2019]. Hanoi: Statistical Publishing House.
- Hillcoat-Nallétamby, S. and J.E. Phillips (2011), 'Sociological Ambivalence Revisited', *Sociology*, 45, pp.202–17. doi:10.1177/0038038510394018 (accessed 30 November 2019).
- Hoang, V.M. and H.Y. Duong (2018), 'Health and Health Care for Older People in Vietnam', *Healthy Aging Research*. doi: 10.12715/har.2018.7.15 (accessed 30 November 2019).
- Kasper, J.D., L.E. Pezzin, and J.B. Rice (2010), 'Stability and Changes in Living Arrangements: Relationship to Nursing Home Admission and Timing of Placement', *Journals of Gerontology: Series B Psychological Sciences and Social Sciences*, 65B(6), pp.783–91. doi:10.1093/geronb/gbq023 (accessed 30 November 2019).
- Liang, J., J.W. Brown, N.M. Krause, M.B. Ofstedal, and J. Bennett (2005), 'Health and Living Arrangements among Older Americans: Does Marriage Matter?' *Journal of Aging and Health*, 17(3), pp.305–35.
- Martikainen, P., E. Nihtila, and H. Moustgaard (2008), 'The Effects of Socioeconomic Status and Health on Transitions in Living Arrangements and Mortality: A Longitudinal Analysis of Elderly Finnish Men and Women from 1997 to 2002', *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 63B(2), pp.S99–S109. doi:10.1093/geronb/63.2.S99 (accessed 30 November 2019).
- Shor, E., D.J. Roelfs, and T. Yogev (2013), 'The Strength of Family Ties: A Meta-Analysis and Meta-regression of Self-Reported Social Support and Mortality', *Social Networks*, 35, pp.626–38. doi: 10.1016/j.socnet.2013.08.004 (accessed 30 November 2019).

- Silverstein, M., X. Chen, and K. Heller (1996), 'Too Much of a Good Thing? Intergenerational Social Support and the Psychological Well-being of Older Parents', *Journal of Marriage and the Family*, 58, pp.970–82. doi:10.2307/353984 (accessed 30 November 2019).
- Takagi, E. and Y. Saito (2013), 'A Longitudinal Analysis of the Impact of Family Support on the Morale of Older Parents in Japan: Does the Parent's Normative Belief in Filial Responsibilities Make a Difference?' *Ageing & Society*, 33(6), pp.1053–76. doi: 10.1017/S0144686X1200044X (accessed 29 February 2020).
- Takagi, E. and Y. Saito (2015). Older Parents' Loneliness and Family Relationships in Japan'. *Ageing International*, 40, pp.353–75.
- Takagi, E. and Y. Saito (2020), 'Loneliness, Family Relationships, and Mortality: Does One's Living Arrangement Make a Difference?' *Geriatrics & Gerontology International*, 20(2), pp.156–60.
- Takagi, E., A. Chan, and Y. Saito (forthcoming), 'Gender Differences in the Association between Social Relationships and Loneliness among Older Adults in Singapore', *Journal of Population Research*.
- Thoits, P.A. (2011), 'Mechanisms Linking Social Ties and Support to Physical and Mental Health', *Journal of Health and Social Behavior*, 52, pp.145–61. doi:10.1177/0022146510395592 (accessed 30 November 2019).
- Tiedt, A.D., Y. Saito, and E.M. Crimmins (2016), 'Depressive Symptoms, Transitions to Widowhood and Informal Support from Adult Children among Older Women and Men in Japan', *Research on Aging*, 38(6), pp.619–42. doi: 10.1177/0164027515595442 (accessed 29 February 2020).
- Tucker, J.S. (2002), 'Health-related Social Control within Older Adults' Relationships', *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 57, pp.P387–P95. doi:10.1093/geronb/57.5.P387 (accessed 30 November 2019).
- United Nations, Department of Economic and Social Affairs (UNDESA), Population Division (2019), *World Population Prospects 2019*. <https://population.un.org/wpp/> (accessed 30 November 2019).
- UNDESA, Population Division (2017), *World Population Ageing*. New York, NY: United Nations.
- UNDESA, Population Division (2015a), *World Population Ageing*. New York, NY: United Nations.
- UNDESA, Population Division (2015b), *World Population Prospects: The 2015 Revision [DVD]*.

- United Nations (2017), Integrated Monitoring Guide for Sustainable Development Goal 6 on Water and Sanitation – Targets and Global Indicators. https://www.unwater.org/app/uploads/2017/10/G2_Targets-and-global-indicators_Version-2017-07-14.pdf. (accessed 30 November 2019).
- Vietnam Women Union (VWU) (2012), *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Hanoi: Women Publishing House.
- Vietnam Population (2017), <https://danso.org/viet-nam/> (accessed 30 November 2019).
- Widmer, E.D., M. Girardin, and C. Ludwig (2018), 'Conflict Structures in Family Networks of Older Adults and Their Relationship with Health-related Quality of Life', *Journal of Family Issues*, 39(6), pp.1573–97.
- Yamada, K. and B. Teerawichitchainan (2015), 'Living Arrangements and Psychological Well-being of the Older Adults after the Economic Transition in Vietnam', *The Journals of Gerontology: Series B*, 70(6), pp.957–68. doi:10.1093/geronb/gbv059 (accessed 30 November 2019).
- Zhang, L. (2015), 'Living Arrangements and Subjective Well-being among the Chinese Elderly', *Open Journal of Social Sciences*, 3, pp.150–61.
- Zhang, Y., Z. Liu, L. Zhang, et al. (2019), 'Association of Living Arrangements with Depressive Symptoms among Older Adults in China: A Cross-sectional Study', *BMC Public Health*, 19(1017). doi:10.1186/s12889-019-7350-8 (accessed 30 November 2019).

Health Status of Older Persons

Tuo-Yu Chen and Yasuhiko Saito

One aim of the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is to update the description of old persons (OPs), focusing on their health and well-being. This chapter explores the dimensions of health status, including self-rated health, diagnosed illnesses, oral health, and other experiences that affect mental health, such as sleep quality, depression, amongst others. The findings will not only help in understanding the health status of OPs but also serve as the evidence base for a follow-up survey in 2020.

Self-rated Health

The LSAHV assessed individuals' self-reported current and past health. The survey asked OPs to describe their state of health now and from birth to age 16. Responses ranged from 1 (very healthy) to 5 (very unhealthy).

Most OPs consider their current health average and past health healthier than average (Table 4.1). More women than men rate themselves as being of average health or unhealthy. A similar trend was observed when comparing their current health with their health up to 16 years. However, only when comparing past health between sex reached a significant level. There was a trend between poor current health and older age, but not poor past health and older age. The comparisons of current or past health with age did not reach significant level.

Table 4.1. Self-assessed Health by Sex and age

Self-assessed health	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Current								
Very healthy	3.1	0.7	n.s.	2.4	0.9	0.5	n.s.	1.8
Healthier than average	26.9	21.2		29.9	16.4	8.8		23.8
Of average health	47.0	48.3		47.3	51.0	43.6		47.7
Somewhat unhealthy	19.9	25.5		18.5	26.4	37.7		23.0
Very unhealthy	3.0	4.1		1.9	5.3	9.0		3.6
N	2,357	2,987		2,525	1,829	990		5,344
While growing up (from birth to age 16)								
Very healthy	39.9	27.5	*	35.2	28.5	31.0	n.s.	33.0
Healthier than average	45.8	55.3		50.6	54.4	47.5		51.1
Of average health	12.6	14.4		12.7	14.4	16.7		13.6
Somewhat unhealthy	1.1	1.8		1.2	1.4	3.2		1.5
Very unhealthy	0.3	0.6		0.08	1.1	1.1		0.5
Not Sure	0.3	0.4		0.3	0.3	0.6		0.4
N	2,357	2,988		2,526	1,829	990		5,345

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Diagnosed Illnesses

The survey asked about two groups of diseases (Table 4.2). Group-1 diseases are not life-threatening and are recognisable by respondents themselves. Group-2 diseases require a medical diagnosis. We asked the OPs whether a doctor had told them that they had any of the diseases from this group. In another set of question, we asked if OPs had ever had a heart attack and if so, what age they had it and if they are taking any medications for a heart condition.

The most common diseases are arthritis, neuralgia, or rheumatism, and the least common tuberculosis (Table 4.2). More women experience group-1 diseases than men. For group-2 diseases, more men reported cerebrovascular disease, respiratory disease, renal or urinary tract ailments, tuberculosis, liver (or gallbladder) disease, and cancer. More women experience diabetes, digestive illness, osteoporosis, glaucoma, and slipped discs. None of the comparisons, however, reach a significant level.

No significant age differences are observed amongst those with group-1 diseases.

Older age is significantly related to the group-2 diseases of high blood pressure and respiratory illness.

Table 4.2. Diagnosed Illnesses by Sex and Age

Diagnosed Illnesses	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
GROUP 1								
Arthritis, neuralgia or rheumatism	37.7	51.8	n.s.	43.3	46.3	54.3	n.s.	45.8
Chronic back pain	24.9	34.4	n.s.	27.6	31.4	38.6	n.s.	30.3
Cataracts	10.0	14.0	n.s.	7.8	15.6	24.0	n.s.	12.3
Fractures of the hip, thigh and pelvis/ broken hip	3.1	3.7	n.s.	2.9	4.7	3.5	n.s.	3.4
Other fractures	5.5	6.8	n.s.	6.0	6.8	6.2	n.s.	6.2
GROUP 2								
High blood pressure	38.4	42.8	n.s.	34.7	49.9	49.5	*	40.9
Angina/myocardial infarction, etc.	10.8	13.2	n.s.	11.6	13.7	11.9	n.s.	12.2
Cerebrovascular disease (hemorrhage, infarction, stroke, etc.)	6.0	4.3	n.s.	4.3	6.0	6.2	n.s.	5.0
Diabetes	8.1	9.8	n.s.	9.1	10.8	6.5	n.s.	9.1
Respiratory illness (chronic, such as asthma, emphysema)	8.7	6.1	n.s.	5.5	8.0	12.1	*	7.2
Digestive illness (stomach or intestinal)	17.5	19.5	n.s.	17.9	22.0	16.3	n.s.	18.6
Renal or urinary tract ailments/kidney	6.6	4.4	n.s.	5.3	5.0	6.0	n.s.	5.3
Osteoporosis	5.5	12.2	n.s.	8.5	10.5	10.6	n.s.	9.3
Tuberculosis	1.6	0.5	n.s.	1.0	1.0	1.0	n.s.	1.0
Ailments of the liver or gallbladder	4.0	3.8	n.s.	4.6	3.2	2.2	n.s.	3.9
Glaucoma	2.0	2.6	n.s.	2.1	2.4	3.5	n.s.	2.4
Cancer	1.9	1.5	n.s.	2.0	1.5	0.9	n.s.	1.7
Slipped disc	4.7	6.2	n.s.	5.7	5.5	4.9	n.s.	5.5
N	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

About 10% of the OPs have had a heart attack (Table 4.3). No sex differences are observed in the incidence of heart attack, age at time of heart attack, and utilisation of heart attack medications. The mean age at time of heart attack was significantly older for older age groups.

Table 4.3. Experience of Heart Attack by Sex and Age

Experience of Heart Attack	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Experience of Heart Attack	7.6	11.1	n.s.	9.3	10.7	9.1	n.s.	9.6
<i>N</i>	2,564	3,471		2,634	1,999	1,402		6,035
Mean age experienced heart attack	64.73	64.08	n.s.	56.74	66.17	73.58	***	64.31
<i>N</i>	152	278		158	179	93		430
Currently taking medicine for heart condition	69.5	71.0	n.s.	65.3	79.7	74.4	n.s.	70.5
<i>N</i>	184	365		194	216	139		549

Sig = Statistical significance, *** $p < 0.001$, n.s. = not significant.
 Source: Calculated by PHAD using original LSAHV data.

Oral Health

The LSAHV identified the OPs' number of natural teeth and number of paired teeth (upper and lower teeth). We asked the OPs if they had dentures and if so, if they used them whilst eating and if they were satisfied with them.

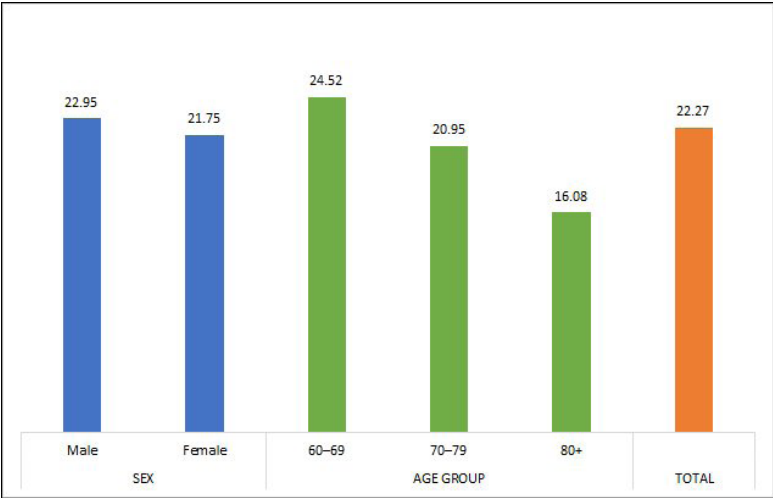
Table 4.4. Oral Health by Sex and Age

Oral Health	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean number of natural teeth	22.95	21.75	n.s.	24.52	20.95	16.08	*	22.27
<i>N</i>	1,953	2,619		2,014	1,520	1,038		4,572
% with no teeth	3.8	5.0	n.s.	2.2	5.0	11.8	*	4.5
<i>N</i>	1,953	2,619		2,014	1,520	1,038		4,572
Mean number of functioning teeth	10.19	9.47	n.s.	11.12	8.79	6.41	*	9.78
<i>N</i>	2,295	3,099		2,387	1,781	1,226		5,394
% who have dentures	14.4	19.0	*	18.9	15.8	12.0	n.s.	17.0
<i>N</i>	2,564	3,471		2,635	1,998	1,402		6,035
% who always use dentures when they eat	95.7	90.5	n.s.	92.1	93.4	92.3	n.s.	92.4
<i>N</i>	385	662		466	387	194		1,047
% who are satisfied with their dentures	83.2	84.2	n.s.	85.7	83.8	73.6	n.s.	83.8
<i>N</i>	383	655		463	387	188		1,038

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.
 Source: Calculated by PHAD using original LSAHV data.

About 5% of the OPs do not have any natural teeth (Figure 4.1). The average number of teeth is 22, of functional teeth about 10 pairs; 17% of the OPs have dentures, with most using them for eating and being satisfied with them. More women use dentures than men but no other sex-based differences were observed. As expected, older age is significantly related to a higher prevalence of no teeth, a lower number of natural teeth, and a lower number of paired teeth. No significant differences were found for denture-related questions across age groups.

Figure 4.1 Mean Number of Natural Teeth by Sex and Age (%)



Source: Calculated by PHAD using original LSAHV data.

Sleep

The LSAHV assessed quantity and quality of sleep. We asked OPs how many hours they sleep per night on average and if they are satisfied with their sleep. They reported the frequency, using a 4-point scale (most of the time to never), of (i) having trouble falling asleep, (ii) having trouble waking up during the night, (iii) having trouble waking up too early and not being able to fall asleep again, and (iv) feeling rested upon waking in the morning. We asked OPs whether they use medications to help them sleep, if they take naps, and how long they nap.

Table 4.5. Sleeping Habits by Sex and Age

Sleeping Habits	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean no. of hours of sleep per night	5.52	5.23	*	5.51	5.15	5.02	*	5.36
N	2,225	2,784		2,379	1,714	916		5,009
% who are satisfied with their sleep	61.6	52.4	n.s.	60.5	52.4	45.0	n.s.	56.5
N	2,355	2,982		2,523	1,827	987		5,337
Have trouble falling asleep								
Most of time	21.4	29.9		23.7	28.1	34.0		26.1
Sometimes	44.0	43.3		41.7	48.6	43.0		43.6
Rarely	29.5	23.6	n.s.	30.0	20.3	19.2	n.s.	26.2
Never	5.1	3.3		4.6	3.0	3.7		4.1
N	2,341	2,965		2,515	1,815	976		5,306
Have trouble with waking up during the night								
Most of time	23.9	30.2		24.7	29.9	36.2		27.4
Sometimes	47.9	45.2		44.8	50.6	46.0		46.4
Rarely	24.9	22.6	n.s.	27.3	18.3	16.2	n.s.	23.6
Never	3.2	2.0		3.2	1.3	1.6		2.6
N	2,243	2,962		2,519	1,813	973		5,305
Have trouble with waking up too early and not being able to fall asleep again								
Most of the time	21.3	27.0		21.9	26.0	33.7		24.4
Sometimes	42.9	45.1		42.7	47.0	45.2		44.1
Rarely	30.5	23.6	n.s.	29.9	23.3	17.5	n.s.	26.6
Never	5.4	4.4		5.5	3.7	3.7		4.9
N	2,339	2,952		2,508	1,812	971		5,291
Feels rested when waking up in the morning								
Most of time	42.8	33.8		41.8	33.2	27.3		37.8
Sometimes	40.0	41.0		39.2	41.7	43.6		40.4
Rarely	15.6	22.1	n.s.	17.0	21.4	25.5	n.s.	19.2
Never	2.0	3.1		2.0	3.7	3.6		2.6
N	2,305	2,896		2,463	1,782	956		5,201
% who have taken any medications or used other treatments to help induce sleep in the past two weeks	6.9	9.1	n.s.	8.2	8.4	7.4	n.s.	8.1
N	2,563	3,468		2,633	1,997	1,401		6,031
% who take naps regularly	42.9	28.4	n.s.	33.9	34.0	38.1	n.s.	34.6
N	2,566	3,470		2,635	1,998	1,403		6,036
Mean duration of naps (in minutes)	61.05	56.97	**	56.97	57.79	67.18	**	58.89
N	1,877	2,242		1,815	1,355	949		4,119

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

On average, respondents sleep 5.36 hours per night and those who nap do so for about 1 hour per day. Men sleep and nap more than women, and older age is related to shorter night-time sleep and longer naps. Although over half of OPs are satisfied with their sleep, about one in four have trouble falling asleep most of the time, waking up during the night, or waking up too early and not being able to return to sleep. Most OPs sometimes, rarely, or never feel rested upon waking up. About 8% report using medications or treatment for sleep. No significant differences in sleep quality, sleep medications, and napping are found between men and women and across age.

Pain

We asked OPs whether they were often troubled with pain and if so, how they rate the severity of pain (mild, moderate, severe); if the pain makes it difficult for them to do a usual activity; and where the pain is located.

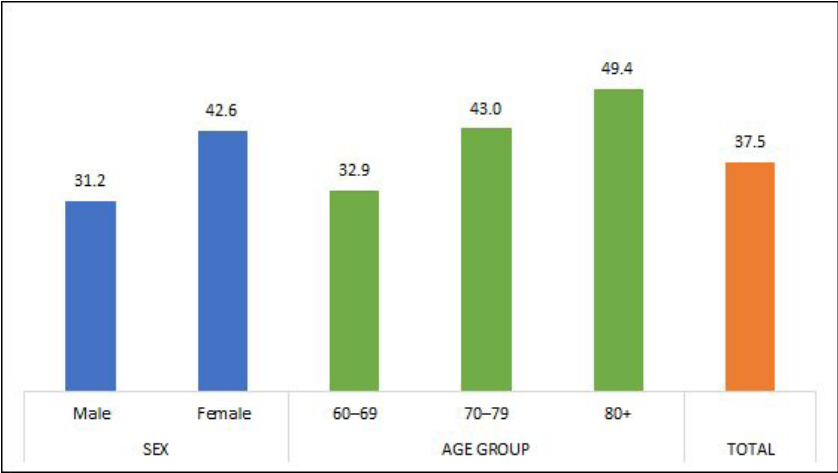
Table 4.6. Experience of Pain by Sex and Age

Pain Experience	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who are often troubled with pain	31.2	42.6	*	32.9	43.0	49.4	n.s.	37.5
N	2,356	2,984		2,524	1,829	987		5,340
Severity of pain experienced								
Mild	24.8	23.4		26.3	20.8	21.5		23.9
Moderate	65.9	69.8	n.s.	65.7	73.4	68.6	n.s.	68.4
Severe	9.4	6.8		8.0	5.9	9.9		7.7
N	697	1,247		793	708	443		1,944
% who said pain make it difficult for them to do their usual activities	56.7	58.8	n.s.	55.8	54.8	70.2	n.s.	58.0
N	701	1,258		798	714	447		1,959
Body parts that felt pain								
Head	30.9	37.0	n.s.	35.2	31.2	38.9	n.s.	34.7
Neck	23.2	26.1	n.s.	25.9	21.5	28.0	n.s.	25.0
Shoulders	31.9	37.8	n.s.	32.4	38.4	41.2	n.s.	35.6
Back	52.3	61.8	n.s.	57.4	54.8	66.8	n.s.	58.3
Lower back	35.1	41.1	n.s.	41.0	34.2	40.2	n.s.	38.9
Joints of the hands/arms	35.8	38.1	n.s.	37.0	36.3	39.8	n.s.	37.3
Hip joint	43.4	51.0	n.s.	44.6	49.2	57.9	n.s.	48.2
Others (knees, ankles, feet, etc.)	53.1	61.5	n.s.	57.7	55.0	66.4	n.s.	58.4
N	698	1,252		795	712	443		1,950

Sig = Statistical significance, * p < 0.05, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

More than 30% of the OPs are troubled by pain, with most reporting moderate pain (Table 4.6, Figure 4.2). About 60% have difficulty performing usual activities because of the pain. The most frequently identified pain location is the back and the least the neck. More women experience pain than men. No significant differences in pain measures were found across age groups.

Figure 4.2. Older Persons Often Troubled with Pain by Sex and Age (%)



Source: Calculated by PHAD using original LSAHV data.

Falls

We asked OPs whether they had fallen in the past 12 months and if so, how many times they had fallen and whether they required medical attention because of the falls.

About 8.4% of OPs said they had fallen 3.71 times on average in the past 12 months (Table 4.7); 38% were injured seriously enough to need medical attention. No significant differences were found regarding sex and age.

Table 4.7. History of Falls by Sex and Age

History of Fall	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who fell in the past 12 months	6.6	9.6	n.s.	8.0	6.9	11.9	n.s.	8.4
N	2,565	3,470		2,632	2,000	1,403		6,035
Mean number of times fallen in the past 12 months	4.12	3.47	n.s.	3.91	4.54	2.58	n.s.	3.71
N	149	290		166	134	139		439
% who injured self seriously enough to need medical treatment	33.2	39.9	n.s.	36.8	38.1	39.1	n.s.	37.6
N	163	342		195	146	164		505

Sig = Statistical significance, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Incontinence

We asked the OPs whether they lose control of bladder or bowel movement and if so, asked how frequently, on a scale from 1 (very often) to 5 (very seldom).

Most OPs reported no loss of control (Table 4.8). Amongst those who had incontinence, the frequency for most was high, ranging from sometimes to very often. No significant differences were found regarding sex and age.

Table 4.8. Incontinence by Sex and Age

Incontinence	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Loss of bladder or bowel movement								
Both bladder or bowel movement control	1.3	1.0		0.3	1.2	3.9		1.1
Bladder control only	3.1	4.3	n.s.	2.4	4.4	8.1	n.s.	3.8
Bowel movement control only	0.4	0.5		0.3	0.7	0.7		0.5
No loss of control	95.2	94.2		97.0	93.8	87.3		94.6
N	2,533	3,427		2,600	1,988	1,372		5,960
Frequency								
Very often	8.6	13.6		5.2	11.5	17.9		11.6
Often	35.1	21.8		27.6	28.7	25.7		27.2
Sometimes	47.6	55.6	n.s.	55.2	49.9	51.4	n.s.	52.4
Seldom	7.3	6.3		8.4	7.8	4.2		6.7
Very seldom	1.4	2.7		3.6	2.1	0.8		2.1
N	183	253		109	118	209		436

Sig = Statistical significance, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Health Risk Behaviours

Smoking. We asked OPs whether they smoke cigarettes and if so, how many per day and at what age they started smoking. If the OPs currently did not smoke, we asked whether they had previously smoked and if so, how many cigarettes per day and what age they started and stopped smoking.

About 15% of OPs are current smokers and 12.4% former smokers (Table 4.9). The current smokers smoke on average 12 cigarettes per day; former smokers used to smoke on average 13 per day. Current smokers started smoking at age 22 on average. Former smokers started at 21 on average and stopped at 52 on average.

Table 4.9. Smoking by Sex and Age

Smoking	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
A. Current smokers								
% who currently smoke	33.0	1.6	**	18.2	12.6	7.6	n.s.	15.0
N	2,562	3,469		2,633	1,999	1,399		6,031
Mean number of cigarettes/cigars smoked per day	12.04	6.97	**	12.60	9.86	9.23	**	11.74
N	722	53		409	254	112		775
Mean age started smoking	21.53	33.66	***	22.24	22.11	22.40	**	22.23
N	593	41		343	207	84		634
B. Former smokers								
% who used to smoke	35.3	0.6	**	12.6	12.3	11.7	n.s.	12.4
N	1,773	3,328		2,149	1,701	1,251		5,101
Mean number of cigarettes/cigars smoked per day	12.78	16.87	*	12.93	13.48	11.94	n.s.	12.90
N	570	25		254	213	128		595
Mean age started smoking	21.04	19.68	**	20.16	21.80	23.00	n.s.	21.01
N	492	19		227	178	106		511
Mean age stopped smoking	52.22	54.35	n.s.	47.91	56.19	62.97	*	52.28
N	504	20		226	188	110		524

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

More men currently smoke and much more than women (33% vs. 1.6%). Men started smoking significantly earlier than women. Significantly more men than women are former smokers, but the women smoked significantly more cigarettes than men and started at a younger age. There is no difference in the age men and women stopped smoking.

Amongst current smokers, although the proportion of smoking OPs did not differ by age, the average number of cigarette smoked per day decreased significantly by age. Significant difference was observed between the average age started smoking and age groups, but the actual ages in years were close. Amongst former smokers, there were no differences in the proportion, the number of cigarettes smoked per day, and the mean age of starting smoke. The older age group, however, stopped smoking at an older age than the younger age groups.

Drinking. We asked the OPs whether they currently drink alcohol and if so, how often and at what age they started drinking. If not, we asked whether they previously drank. If so, we asked at what ages they started and stopped drinking.

Table 4.10. Drinking by Sex and Age

Drinking	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
A. Current drinkers								
% who are currently alcohol drinkers	47.2	2.8	**	26.6	18.3	10.0	**	21.8
N	2,560	3,469		2,630	2,000	1,399		6,029
On average, frequency drinking alcohol amongst current alcohol drinkers								
(Almost) everyday	17.7	17.3		17.0	19.7	17.7		17.6
Once every two or three days	16.0	14.4		14.8	17.9	20.1		15.8
Once a week	10.7	7.5		11.8	6.8	7.5		10.5
Once or twice a month	16.8	10.4	n.s.	17.3	15.7	9.3	n.s.	16.3
Less than once a month	4.7	4.2		4.7	4.7	3.6		4.7
Occasional	34.2	46.3		34.3	35.2	41.8		35.1
N	1,061	107		653	363	152		1,168
Mean age started drinking regularly amongst those who are current alcohol drinkers	23.86	32.40	n.s.	23.68	26.18	26.86	n.s.	24.41
N	765	63		473	250	105		828
B. Former drinkers								
% who used to drink	36.2	2.3	**	10.5	14.7	14.0	n.s.	12.2
N	1,454	3,254		1,916	1,589	1,203		4,708
Mean age started drinking regularly amongst those who used to drink alcohol	22.67	27.60	n.s.	23.12	22.80	24.08	n.s.	23.21
N	356	395		137	168	90		395
Mean age stopped drinking regularly amongst those who used to drink alcohol	61.71	59.15	n.s.	56.15	63.55	70.67	*	61.50
N	343	34		133	149	95		377

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

About 22% of the OPs are current drinkers and 12% former drinkers (Table 4.10). Most current drinkers drink occasionally and started drinking at age 24 on average. Former drinkers started drinking at 23 on average and stopped at 62 on average.

More men than women are current drinkers (47.2% vs. 2.8%). The proportion of current drinkers decreased with age. However, the frequency of drinking and the average starting age are about the same by sex and age. More men than women are former drinkers (36.2% vs. 2.3%), but the starting and stopping ages are similar by sex and age. The proportion of former drinkers is the same across age groups. The average starting age is similar across age groups. However, the older age group stopped at a significantly older age than the younger age group.

Objective Measures of Health

We used kilograms (kg) and centimetres (cm). Body mass index (BMI, kg/m²) was calculated for each OP. The BMI was then categorised into underweight (<18.50), normal weight (18.5–24.99), overweight (25–29.99), and obese (≥ 30). Waist circumference was also measured. Handgrip strength was displayed as an average of the right and left hands' force in kilograms. The three-test balance scale includes three timed static balance tasks of increasing difficulty. Gait speed was measured for 5 meters.

BMI differs significantly across age groups, with more younger OPs obese or overweight than the older ones (Table 4.11). The proportion of underweight in the oldest cohort is much higher than in other groups (80+: 28.1%; 70–79: 19.1%; 60–69: 11.2%). We observed no differences in the mean waist circumference by sex or age. Men had stronger grip than women. Older age was significantly related to decreased grip strength.

Men significantly held longer for the semi-tandem tests than women, but not for the side-by-side and tandem tests. Older OPs performed poorly on all three balance stances. Gender does not make a difference in gait speed. Older age is significantly related to slower gait.

Table 4.11. Objective Measures of Health by Sex and Age

Indicators	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean weight (kg)	56.18	50.48	**	54.90	51.17	47.76	*	52.92
N	2,362	3,159		2,516	1,853	1,152		5,521
Mean height standing (cm)	161.20	150.35	**	156.61	154.01	150.37	*	155.00
N	2,412	3,237		2,546	1,898	1,205		5,649
Computed Body Mass Index (BMI)								
Underweight (<18.50)	17.6	14.2		11.2	19.1	28.1		15.7
Normal weight (18.5-24.99)	69.4	65.0	n.s.	69.7	65.7	57.3	*	66.9
Overweight (25-29.99)	12.1	18.5		17.3	14.2	12.0		15.8
Obese (>=30)	0.8	2.3		1.7	1.0	2.6		1.7
N	2,357	3,150		2,513	1,851	1,143		5,507
Mean waist circumference (cm)	83.01	83.82	n.s.	84.10	83.12	81.63	*	84.47
N	2,412	3,238		2,535	1,890	1,225		5,650
Grip strength: % who were able to perform grip strength:	92.0	90.4	n.s.	94.1	91.1	80.7	**	91.1
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean score: Those able to perform grip strength (kg)	24.10	16.25	**	21.69	17.93	14.07	**	19.63
N	2,284	3,029		2,428	1,788	1,097		5,313
Balance test: Mean score (seconds) of those able to perform the following:								
Side-by-side	14.72	14.54	n.s.	14.81	14.47	14.02	*	14.62
N	2,305	3,053		2,483	1,797	1,078		5,358
Semi-tandem	14.39	13.97	*	14.57	13.86	12.87	*	14.15
N	2,297	3,034		2,478	1,794	1,059		5,331
Tandem	13.25	12.33	n.s.	13.63	12.16	9.88	**	12.73
N	2,261	1,946		2,456	1,767	984		5,207
Those able to perform the following in 15 seconds (%):								
Side-by-side	93.6	90.1	n.s.	95.6	87.1	82.3	n.s.	91.6
N	2,305	3,053		2,483	1,797	1,078		5,358
Semi tandem	88.4	81.4	*	90.4	78.2	69.2	**	84.4
N	2,297	3,034		2,478	1,794	1,059		5,331
Tandem	74.9	66.2	n.s.	78.4	61.8	46.6	*	70.0
N	2,261	1,946		2,456	1,767	984		5,207
Gait speed Those able to perform gait speed test (%)	91.5	91.1	n.s.	95.2	91.0	78.1	***	91.3
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean duration (sec)	12.58	14.67	n.s.	12.77	13.96	17.71	n.s.	13.77
N	2,300	3,067		2,476	1,804	1,087		5,367

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Summary, Conclusions, and Recommendations

The report investigates health disparities in self-rated health, diagnosed illnesses, oral health, sleep, pain, falls, incontinence, mental health, health risk behaviours, and objective measures of health between sexes and age groups (60–69 years old vs. 70–79 years old vs. 80+ years old) amongst older adults in Viet Nam.

Self-rated health. A significant difference in self-rated health from birth to age 16 was observed between the sexes. Although more males considered themselves very healthy when growing up, more females said they were of above average health or average health during this period. There was no significant difference between age groups.

Diagnosed illnesses. There were no significant differences in group 1 and group 2 diseases between sexes. Age was not related to group 1 diseases, but older age was significantly associated with higher prevalence of group 2 diseases, specifically high blood pressure and respiratory illness. Moreover, the average age of experiencing heart attack was significantly higher amongst older age groups.

Oral health. The number of teeth and pairs of teeth was similar between sexes. Significantly more females than males had dentures. The number of teeth and pairs of teeth decreased significantly with increased age. There was no significant difference in denture usage between age groups.

Sleep. Males slept significantly longer than females, but the average hours of sleep for both sexes was lower than the recommended hours of sleep per night (7 or 8 hours). There were no differences in insomnia subtypes and sleep medication usage between sexes. Although the prevalence of taking naps was similar between sexes, males took significantly longer naps than females. The average number of sleep hours was negatively related to age group. Insomnia subtypes did not differ by age group. The prevalence of taking naps was similar across age groups, but older age groups took significantly longer naps than younger ones.

Pain. Significantly more females reported pain than males, but pain intensity, pain-related activity limitation, and specific pain locations did not differ by sex. Older age was not associated with the prevalence of pain, pain intensity, pain-related activity limitation, and specific pain locations.

Falls. The prevalence of falls in the past 12 months was lower than in the Western samples, but there were no significant differences in falls, number of falls, and fall-related medical treatment by sex and age group.

Incontinence. Most older adults reported no issues with continence. Amongst those who had lost control, the frequency of incontinence did not differ by sex and age group.

Smoking. Significantly more males than females were current smokers or past smokers. However, amongst the current smokers, males smoked significantly more cigarettes and/or cigars per day than females; amongst former smokers, females smoked significantly more cigarettes and/or cigars per day than males. Male current smokers started at a significantly younger average age than female current smokers, and female former smokers started at a significantly younger average age than male former smokers. There was no difference in the prevalence of current smokers by age group, but older age was significantly related to fewer cigarettes and/or cigars smoked per day.

Drinking. Significantly more males were either current drinkers or former drinkers than females. Older age was significantly related to a lower prevalence of current drinkers. The frequency of drinking did not differ by sex and age group.

Objective measures of health. Females were significantly lighter and shorter than males. Females also had significantly weaker grip than males. Fewer females than males were able to complete the semi-tandem test. Older age was significantly related to reduced weight, height, waist circumference, grip strength, and the completion of semi-tandem, tandem, and gait speed tests. A higher proportion of those in older age groups were considered underweight and fewer had normal weight or were considered obese than those in the younger age groups.

The LSAHV included a nationally representative sample with extensive measures of health outcomes. The report depicts the health status amongst older adults in Viet Nam, providing important information for policymakers and healthcare professionals for planning and practice. Researchers should conduct further research to help better understand the health status of the ageing population in Viet Nam and develop timely interventions.

References

- Ajwani, S., K. Mattila, T. Narhi, R. Tilvis, and A. Ainamo, (2003), 'Oral Health Status, C-reactive Protein and Mortality – A 10 Year Follow-up Study', *Gerodontology*, 20(1), pp.32–40.
- American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons (2009), 'Pharmacological Management of Persistent Pain in Older Persons', *Journal of the American Geriatrics Society*, 57(8), pp.1331–46.
- Ancoli-Israel, S. (2009), 'Sleep and Its Disorders in Aging Populations', *Sleep Medicine*, 10, S7–S11.
- Bardage, C. et al. (2005), 'Self-rated Health among Older Adults: A Cross-national Comparison', *European Journal of Ageing*, 2(2), pp.149–58.
- Beaudreau, S.A. and R. O'Hara (2009), 'The Association of Anxiety and Depressive Symptoms with Cognitive Performance in Community-dwelling Older Adults', *Psychology and Aging*, 24(2), p.507.
- Blake, A.J. et al. (1988), 'Falls by Elderly People at Home: Prevalence and Associated Factors', *Age and Ageing*, 17, pp.365–72.
- Brand, C., S.A. Bridenbaugh, M. Perkovac, F. Glenz, C.E. Besimo, P. Sendi, R.W. Kressig, and C.P. Marinello (2015), 'The Effect of Tooth Loss on Gait Stability of Community-dwelling Older Adults', *Gerodontology*, 32(4), pp.296–301.
- Campbell, A.J., J. Reinken, B.C. Allan, and G.S. Martinez (1981), 'Falls in Old Age: A Study of Frequency and Related Clinical Factors', *Age and Ageing*, 10, pp.264–70.
- Cedraschi, C., C. Luthy, A.-F. Allaz, F. Herrmann, and C. Ludwig (2016), 'Low Back Pain and Health-related Quality of Life in Community-dwelling Older Adults', *European Spine Journal*, 25(9), pp.2822–32.
- Chen, T.-Y., S. Lee, and O.M. Buxton (2017), 'A Greater Extent of Insomnia Symptoms and Physician-recommended Sleep Medication Use Predict Fall Risk in Community-dwelling Older Adults', *Sleep*, 40(11), zsx142.
- Chen, T.-Y., S. Lee, M.M. Schade, Y. Saito, A. Chan, and O.M. Buxton (2019), 'Longitudinal Relationship between Sleep Deficiency and Pain Symptoms among Community-dwelling Older Adults in Japan and Singapore', *Sleep*, 42(2), zsy219.
- Cricco, M., E.M. Simonsick, and D.J. Foley (2001), 'The Impact of Insomnia on Cognitive Functioning in Older Adults', *Journal of the American Geriatrics Society*, 49(9), pp.1185–89.

- Dai, Y., C.-Y. Zhang, B.-Q. Zhang, Z. Li, C. Jiang, and H.-L. Huang (2016), 'Social Support and the Self-rated Health of Older People: A Comparative Study in Tainan Taiwan and Fuzhou Fujian Province', *Medicine*, 95(24), e3881.
- Dam, T.T.L., S. Ewing, S. Ancoli-Israel, K. Ensrud, S. Redline, and K. Stone Group (2008), 'Association between Sleep and Physical Function in Older Men: The Osteoporotic Fractures in Men Sleep Study', *Journal of the American Geriatrics Society*, 56(9), pp.1665–73.
- Dew, M.A. (2003), 'Healthy Older Adults' Sleep Predicts All-cause Mortality at 4 to 19 Years of Follow-up', *Psychosomatic Medicine*, 65(1), pp.63–73.
- Eriksson, I., A.-L. Undén, and S. Elofsson (2001), 'Self-rated Health. Comparisons between Three Different Measures. Results from a Population Study', *International Journal of Epidemiology*, 30(2), pp.326–33.
- Farage, M.A., K.W. Miller, E. Berardesca, and H.I. Maibach (2008), 'Psychosocial and Societal Burden of Incontinence in the Aged Population: A Review', *Archives of Gynecology and Obstetrics*, 277(4), pp.285–90.
- Fiske, A., J.L. Wetherell, and M. Gatz (2009), 'Depression in Older Adults', *Annual Review of Clinical Psychology*, 5, pp.363–89.
- Foley, D., S. Ancoli-Israel, P. Britz, and J. Walsh (2004), 'Sleep Disturbances and Chronic Disease in Older Adults: Results of the 2003 National Sleep Foundation Sleep in America Survey', *Journal of Psychosomatic Research*, 56(5), pp.497–502.
- Foley, D., A.A. Monjan, S.L. Brown, E.M. Simonsick, R.B. Wallace, and D.G. Blazer (1995), 'Sleep Complaints among Elderly Persons: An Epidemiologic Study of Three Communities', *Sleep*, 18(6), pp.425–32.
- Geerlings, S.W., J.W. Twisk, A.T. Beekman, D.J. Deeg, and W. van Tilburg (2002), 'Longitudinal Relationship between Pain and Depression in Older Adults: Sex, Age and Physical Disability', *Social Psychiatry and Psychiatric Epidemiology*, 37(1), pp.23–30.
- Ghezzi, E.M. and J.A. Ship (2000), 'Dementia and Oral Health', *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*, 89, pp.2–5.
- Gooneratne, N.S. and M.V. Vitiello (2014), 'Sleep in Older Adults: Normative Changes, Sleep Disorders, and Treatment Options', *Clinics in Geriatric Medicine*, 30(3), pp.591–627.
- Gotfredsen, K. and A.W. Walls (2007), 'What Dentition Assures Oral Function?' *Clinical Oral Implants Research*, 18, pp.34–45.

- Hämäläinen, P., T. Rantanen, M. Keskinen, and J.H. Meurman (2004), 'Oral Health Status and Change in Handgrip Strength over a 5-year Period in 80-year-old People', *Gerodontology*, 21(3), pp.155–60.
- Hamer, M., C.J. Bates, and G.D. Mishra (2011), 'Depression, Physical Function, and Risk of Mortality: National Diet and Nutrition Survey in Adults Older than 65 Years', *The American Journal of Geriatric Psychiatry*, 19(1), pp.72–78.
- Kron, M., S. Loy, E. Sturm, T.H. Nikolaus, and C. Becker (2003), 'Risk Indicators for Falls in Institutionalized Frail Elderly', *American Journal of Epidemiology*, 158, pp.645–53.
- Larsson, C., E.E. Hansson, K. Sundquist, and U. Jakobsson (2017), 'Chronic Pain in Older Adults: Prevalence, Incidence, and Risk Factors', *Scandinavian Journal of Rheumatology*, 46(4), pp.317–25.
- Locker, D., M.A. Clarke, and B. Payne (2000), 'Self-perceived Oral Health Status, Psychological Well-being, and Life Satisfaction in an Older Adult Population', *Journal of Dental Research*, 79, pp.970–75.
- Luukinen, H., K. Koski, P. Laippala, and S.L. Kivela (1995), 'Risk Factors for Recurrent Falls in the Elderly in Long-term Institutional Care', *Public Health*, 109, pp.57–65.
- Marshall, G.L. and R. Tucker-Seeley (2018), 'The Association between Hardship and Self-rated Health: Does the Choice of Indicator Matter?' *Annals of Epidemiology*, 28(7), pp.462–67.
- Meurman, J.H., M. Sanz, and S.-J. Janket (2004), 'Oral Health, Atherosclerosis, and Cardiovascular Disease', *Critical Reviews in Oral Biology & Medicine*, 15, pp.403–13.
- Moynihan, P., M. Thomason, A. Walls, K. Gray-Donald, J.A. Morais, H. Ghanem, and J. Lund (2009), 'Researching the Impact of Oral Health on Diet and Nutritional Status: Methodological Issues', *Journal of Dentistry*, 37, pp.237–49.
- Nevitt, M.C., S.R. Cummings, S. Kidd, and D. Black (1989), 'Risk Factors for Recurrent Nonsyncopal Falls: A Prospective Study', *The Journal of the American Medical Association*, 261, pp.2663–68.
- Ohayon, M.M. and M.-F. Vecchierini (2005), 'Normative Sleep Data, Cognitive Function and Daily Living Activities in Older Adults in the Community', *Sleep*, 28(8), pp.981–89.
- Patel, K.V., J.M. Guralnik, E.J. Dansie, and D.C. Turk (2013), 'Prevalence and Impact of Pain among Older Adults in the United States: Findings from the 2011 National Health and Aging Trends Study', *PAIN*, 154(12), pp.2649–57.

- Prudham, D. and J.G. Evans (1981), 'Factors Associated with Falls in the Elderly: A Community Study', *Age and Ageing*, 10, pp.141–46.
- Ship, J.A. (2003), 'Diabetes and Oral Health: An Overview', *The Journal of the American Dental Association*, 134, 4S–10S.
- Simonsick, E.M., R.B. Wallace, D.G. Blazer, and L.F. Berkman (1995), 'Depressive Symptomatology and Hypertension-associated Morbidity and Mortality in Older Adults', *Psychosomatic Medicine*, 57(5), pp.427–35.
- Singh-Manoux, A., P. Martikainen, J. Ferrie, M. Zins, M. Marmot, and M. Goldberg (2006), 'What Does Self Rated Health Measure? Results from the British Whitehall II and French Gazel Cohort Studies', *Journal of Epidemiology and Community Health*, 60(4), pp.364–72.
- Specht, J.K.P. (2005), '9 Myths of Incontinence in Older Adults: Both Clinicians and the Over-65 Set Need to Know More', *The American Journal of Nursing*, 105(6), pp.58–68.
- Tinetti, M.E. and M. Speechley (1989), 'Prevention of Falls among the Elderly', *New England Journal of Medicine*, 320, pp.1055–59.
- Tinetti, M.E., M. Speechley, and S.F. Ginter (1988), 'Risk Factors for Falls among Elderly Persons Living in the Community', *New England Journal of Medicine*, 319, pp.1701–07.
- Tromp, A.M., J.H. Smit, D.J.H. Deeg, L.M. Bouter, and P. Lips (1998), 'Predictors for Falls and Fractures in the Longitudinal Aging Study Amsterdam', *Journal of Bone and Mineral Research*, 13, pp.1932–39.
- United Nations Department of Economic and Social Affairs Population Division (2017), *World Population Ageing 2017 – Highlights* (ST/ESA/SER.A/397).
- World Health Organization (1946), 'Constitution of the World Health Organization', *American Journal of Public Health and the Nation's Health*, 36, pp.1315–23.
- Yamamoto, T. et al. (2012), 'Dental Status and Incident Falls among Older Japanese: A Prospective Cohort Study', *BMJ open*, 2, e001262.
- Yoshida, M., T. Kikutani, G. Okada, T. Kawamura, M. Kimura, and Y. Akagawa (2009), 'The Effect of Tooth Loss on Body Balance Control among Community-dwelling Elderly Persons', *International Journal of Prosthodontics*, 22(2), pp.136–9.
- Zimmer, Z., J.N. Natividad, M.B. Ofstedal, and H.-S. Lin (2002), 'Physical and Mental Health of the Elderly'. In A. I. Hermalin (ed.), *The Well-Being of the Elderly in Asia*, Ann Arbor: University of Michigan Press, pp.361–411.

Functional Health of Older Persons

Tuo-Yu Chen and Yasuhiko Saito

The world population is ageing rapidly. The population aged 60 years and over is expected to increase by about 2.5 times (0.8 billion to 2 billion) from 2013 to 2050; 80% will reside in low- and middle-income countries by 2050 (Chatterji, Byles, Cutler, Seeman, and Verdes, 2015; UNDESA-Population Divisions, 2013). Advanced medicine lowers the mortality rates from lethal diseases, however, and leaves individuals living with a wide range of non-fatal health conditions and likely disability at the same time (James et al., 2018). As a consequence, scholars have advocated revisiting and modifying the definition of health by the World Health Organization ('a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity') because it suggests that health is the absence of disease or infirmity (Huber et al., 2011; World Health Organization, 1946).

Functional health can be operationalised as individuals' abilities to perform day-to-day activities regardless of diseases (Chatterji et al., 2015). It is a far better predictor of survival than the presence of single or multiple diseases (Lordos et al., 2008). Researchers have, therefore, suggested considering good health as individuals' ability to perform day-to-day activities without much difficulty despite existing health conditions (Chatterji et al., 2015). Several measures have been developing to assess functional health. Depending on which conceptual model of disability a measure was based on, the scope and terminology would be slightly different (Janke, Chen, and Young, 2015; Verbrugge, 2016). For instance, 'functional limitations' in the Nagi model of disablement, 'disability' in the International Classification of Impairment, Disability, and Handicaps, and 'activity limitations' in the International Classification of Functioning, Disability, and Health describe a similar concept because they all refer to loss of ability to execute activities at a personal level (Janke et al., 2015).

In this chapter, we describe functional health at a personal level amongst older adults in Viet Nam using six measures included in the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV). These measures include difficulty with activities of daily living (ADLs), difficulty with instrumental activities of daily living (IADLs), the Washington Group Short Set on Functioning (WG-SS), the Global Activity Limitation Index (GALI), bedridden in the past 2 weeks, and the Nagi functional measures. Descriptive analyses, stratified by sex and age group (i.e. 60–69 years old vs. 70–79 years old vs. 80+ years old), were used to investigate the prevalence of functional status amongst older adults in Viet Nam.

Prevalence of Disability

Difficulty with ADLs. We asked the older persons (OPs) about their health or physical state, whether they found it difficult to perform the following activities independently without assistance from a person or assistive device: (i) taking a bath or shower, (ii) dressing, (iii) eating, (iv) standing up from a bed or chair or sitting down on a chair, (v) walking around the house, (vi) going outside (leaving the house), and (vii) using the toilet.

Table 5.1 displays functional health assessed by difficulty with ADLs. The most common ADL difficulty was going outside (leaving the house) for both sexes (males: 9.7%; females: 13.1%), and least common was eating (males: 3.0%; females: 4.0%). For all seven ADLs, more females reported difficulty than males, no significant differences were observed. The percentage of respondents with at least one ADL difficulty and the average number of ADL difficulties were higher amongst females than males, but no significant differences existed between sexes.

The most common ADL difficulty was going outside (leaving the house) for all age groups (60–69: 5.4%; 70–79: 12.2%; 80+: 32.8%) and least common ADL difficulty was eating (60–69: 0.9%; 70–79: 3.3%; 80+: 13.2%). Significant differences were found in all seven daily activities across age cohorts. More individuals in the oldest cohort experienced ADL difficulty, followed by the 70–79-year-old group and then the youngest group. The percentage of respondents with at least one ADL difficulty and the average number of ADL difficulties significantly increased with advanced age.

Table 5.1. Activities of Daily Living (ADLs) by Sex and Age

Activities of Daily Living	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who experience difficulty with the following activities								
Take a bath/shower by oneself	5.9	8.8	n.s.	2.7	6.2	26.2	***	7.5
Dress	5.1	7.8	n.s.	2.6	5.5	22.3	***	6.6
Eat	3.0	4.0	n.s.	0.9	3.3	13.2	***	3.6
Stand up from a bed/chair; sit down on a chair	6.9	9.4	n.s.	3.9	7.7	24.5	**	8.3
Walk around the house	6.4	8.0	n.s.	3.5	6.9	21.4	**	7.3
Go outside (leave the house)	9.7	13.1	n.s.	5.4	12.2	32.8	***	11.7
Using the toilet	4.4	6.4	n.s.	1.9	5.2	18.7	***	5.6
% who experienced at least one ADL difficulty	12.6	16.8	n.s.	7.2	15.9	40.6	***	15.0
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean number of ADLs with difficulty	3.55	3.59	n.s.	3.16	3.24	3.90	***	3.57
N	342	576		161	273	484		918

Sig = Statistical significance, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Difficulty with IADL. We asked the OPs if they had difficulty performing the following activities because of their health or physical state: (i) preparing own meals; (ii) leaving home to purchase necessary items or medication; (iii) taking care of financial matters such as paying utilities (e.g. electricity, water); (iv) using a telephone; (v) dusting, cleaning up, or other light housework; (vi) taking a bus, motorcycle taxi, or public transportation; and (vii) taking medication as prescribed (Table 5.2).

For males, using the telephone (12.8%) and taking a bus, motorcycle taxi, or public transportation (12.2%) were the most common IADL difficulties, and the least taking medication as prescribed (5.8%). The most common IADL difficulty for females was using the telephone (20.1%), and the least common taking medication as prescribed (8.6%). For all seven IADLs, more females experienced difficulty than males.

There were significant differences in leaving home to purchase necessary items or medication (13.9% vs. 10.3%), taking care of financial matters such as paying utilities (13.6% vs. 9.4%), and using a telephone (20.1% vs 12.8%). More females significantly had at least one IADL difficulty than males (33.7% vs 23.9%). The average number of IADL difficulties between the sexes was about the same.

Table 5.2. Instrumental Activities of Daily Living (IADLs) by Sex and Age

Instrumental Activities of Daily Living	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who experience difficulty with the following activities								
Prepare own meals	9.8	11.0	n.s.	3.6	11.1	33.5	**	10.5
Leave home to purchase necessary items/medication	10.3	13.9	*	4.9	12.6	37.8	**	12.3
Take care of financial matters such as paying utilities	9.4	13.6	*	5.2	12.5	33.7	**	11.8
Use the telephone	12.8	20.1	*	9.5	20.7	37.8	**	17.0
Dust, clean up, other light housework	7.7	10.4	n.s.	4.2	8.9	27.4	***	9.2
Take bus/motorcycle taxi/public transport to leave home	12.2	18.5	n.s.	7.4	17.8	42.2	***	15.8
Take medication as prescribed	5.8	8.6	n.s.	2.4	7.4	24.8	***	7.4
N	2,570	3,480		2,638	2,004	1,408		6,050
% who experienced at least one IADL difficulty								
	23.9	33.7	*	18.2	34.4	61.7	***	29.5
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean number of IADLs with difficulty	3.20	3.11	n.s.	2.19	2.76	4.07	***	3.14
N	538	990		368	555	605		1528

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

The most common IADL difficulty was using the telephone for those 60–69 years old and those 70–79 years old (9.5% vs. 20.7%), and the least common IADL difficulty was taking medication as prescribed (2.4% vs. 7.4%). As expected, for the oldest cohort, the most common IADL difficulty was taking a bus, jeepney, or public transportation (42.2%), and the least common taking medication as prescribed (24.8%). The differences in difficulty performing all seven IADLs increased significantly with age, as did the percentage of OPs having at least one IADL difficulty. This percentage changed more than three times, from 18.2% for the youngest cohort to 61.7% amongst those 80+ years.

Washington Group Short Set on Functioning (WG-SS). The WG-SS includes a generic set of questions on functioning that are necessary to lead an independent life (Madans et al., 2004; Verbrugge, 2016; Washington Group on Disability Statistics, 2017). We asked the OPs to rate whether they had difficulty with (i) seeing (even if wearing glasses); (ii) hearing (even if using a hearing aid); (iii) walking or climbing steps; (iv) remembering or concentrating; (v) self-care (e.g. washing all over or dressing); and (vi) communicating (e.g. understanding or being understood by others) (Table 5.3).

Table 5.3. Washington Group Short Set on Functioning by Sex and Age

Washington Group Short Set on Functioning	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Seeing, even if wearing glasses								
No difficulty	67.4	58.6	n.s.	71.8	59.7	33.6	n.s.	62.4
Some difficulty	29.1	36.0		26.7	37.0	49.5		33.1
A lot of difficulty	2.6	4.2		1.2	2.3	13.6		3.5
Cannot do it at all	0.8	1.2		3.2	1.1	3.4		1.0
Hearing, even if using a hearing aid								
No difficulty	75.8	75.6	n.s.	85.1	71.6	48.7	n.s.	75.7
Some difficulty	20.7	19.1		13.5	24.8	34.7		19.8
A lot of difficulty	3.1	4.7		1.3	3.2	14.6		4.0
Cannot do it at all	0.4	0.6		0.1	0.4	2.0		0.5
Walking or climbing steps								
No difficulty	64.4	49.4	n.s.	68.8	49.5	19.9	n.s.	55.8
Some difficulty	27.2	36.0		25.7	38.2	46.3		32.2
A lot of difficulty	5.1	10.7		4.3	8.5	21.8		8.3
Cannot do it at all	3.3	4.0		1.2	3.9	12.0		3.7
Remembering or concentrating								
No difficulty	59.4	47.9	*	63.8	45.3	25.2	**	52.8
Some difficulty	35.4	42.9		33.6	46.3	51.3		39.7
A lot of difficulty	4.1	7.7		2.1	7.4	18.7		6.2
Cannot do it at all	1.1	1.5		0.5	1.0	4.8		1.4
Self-care (washing all over or dressing)								
No difficulty	87.0	81.8	n.s.	92.2	83.0	56.8	**	84.0
Some difficulty	9.3	13.5		6.3	13.8	27.7		11.7
A lot of difficulty	2.1	2.7		1.1	1.7	8.2		2.4
Cannot do it at all	1.7	2.0		0.4	1.5	7.4		1.9
Communicating								
No difficulty	87.1	82.8	n.s.	91.7	83.9	61.1	***	84.7
Some difficulty	10.4	13.1		7.1	13.5	26.7		11.9
A lot of difficulty	1.6	3.1		0.9	1.9	8.7		2.5
Cannot do it at all	0.9	1.0		0.4	0.7	3.4		1.0
% with at least one difficulty	59.1	68.3	n.s.	54.1	71.8	89.0	***	64.4
% with at least one with 'some difficulty'	56.5	64.6	n.s.	52.1	69.2	80.7	**	61.1
% with at least one with 'a lot of difficulty'	11.5	17.3	n.s.	7.2	15.9	39.9	***	14.8
% with at least one with 'cannot do it at all'	4.0	5.4	n.s.	1.9	5.0	14.8	**	4.8
N	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

For males, the most common difficulty (including some difficulty, a lot of difficulties, and cannot at all) was remembering or concentrating (40.6%); the least common were self-care (13%) and communicating (12.9%). About half the females said they had at least some difficulty with walking or climbing steps (51.6%) and remembering or concentrating (52.1%). Females experienced less difficulty than men with self-care (18.2%) and communicating (17.2%). Amongst the six activities, the difference between males and females is significant in remembering or concentrating. More females reported difficulty remembering or concentrating than males. More females than males consistently reported more difficulty than males in at least one activity with difficulty, some difficulty, a lot of difficulties, and cannot at all, but the differences are not significant.

The most common difficulty (including some difficulty, a lot of difficulties, and cannot at all) for those 60–69 years old and 70–79 was remembering or concentrating (36.2% vs. 54.7%). The least common were self-care (7.8% vs. 17%) and communicating (8.3% vs. 16.1%). For those aged 80+ years, the most common difficulty was walking or climbing steps (80.1%) and the least common was communicating (38.9%). The proportion of OPs who had difficulty in all activities increased significantly with advanced age. A similar trend was observed regarding age, based on four levels of difficulty (i.e. at least one activity with difficulty, some difficulty, a lot of difficulties, and cannot at all) amongst the six activities.

Global Activity Limitation Index (GALI). GALI is a one-item global measure of functional status (Hsiao, Wu, Hsu, Saito, and Lin, 2019; Van Oyen, Bogaert, Yokota, and Berger, 2018). We asked the OPs, ‘For the past 6 months or more, have you been limited because of a health problem in activities people usually do?’

Table 5.4 shows functional health assessed by GALI. Although more females reported having a least some limitations (i.e. limited but not severely and severely limited) than males, no significant differences were found between sexes. A significant difference was observed regarding age. The proportion of those who reported not limited at all decreased with advanced age (60–69 years: 50.2%; 70–79: 33.6%; 80+: 16.1%). The proportion of those aged 60–69 years who reported limited but not severely is 43.0%, but the proportions of those aged 70–79 and 80 were about the same (53.7% vs. 50.1%). The proportion of those who are severely limited increased with (60–69 years old: 6.9%; 70–79: 12.7%; 80+: 33.7%).

Table 5.4. Global Activity Limitation Index (GALI) by Sex and Age

Global Activity Limitation Index	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Yes, severely limited	11.3	14.0		6.9	12.7	33.7		12.8
Yes, limited but not severely	42.8	49.8	n.s.	43.0	53.7	50.1	**	46.8
Not limited at all	45.9	36.3		50.2	33.6	16.1		40.4
<i>N</i>	2,548	3,430		2,614	1,978	1,386		5,978

Sig = Statistical significance, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Bedridden in the past 2 weeks. This measure was used to assess short-term immobility, which proximately captures acute functional decline (Sullivan, 1971). We asked the respondents whether they had been bedridden for any reason in the past two weeks. If yes, we asked how many days they stayed in bed in the past 2 weeks (Table 5.5).

Almost 2% of males and females were bedridden in the previous 2 weeks. The proportion of respondents who were bedridden increased from 1.2% amongst those aged 60–69 years to 2.7% amongst those aged 70–79 years, and 7.1% amongst those aged 80+ years. No significant differences existed between sexes and age groups.

Table 5.5. Experience of being Bedridden by Sex and Age

Experience being Bedridden	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who have been bedridden during the past two weeks	2.1	2.8	n.s.	1.2	2.7	7.1	n.s.	2.5
<i>N</i>	2,562	3,465		2,632	1,998	1,397		6,027
Mean number of days in bed	11.95	11.26	n.s.	10.4	11.5	11.9	n.s.	11.5
<i>N</i>	66	118		33	56	95		184

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Nagi functional measures. We asked the OPs if they had difficulty performing the following independently without assistance from a person or assistive device: (i) walking 200–300 meters, (ii) climbing 10 steps without resting, (iii) standing (without sitting) for 2 hours, (iv) sitting for 2 hours continuously, (v) stooping or bending knees, (vi) raising hands above the head,

(vii) extending arms out in front as if to shake hands, (viii) grasping with fingers or moving fingers easily, (ix) lifting an object of about 10 kilograms (kg), and (x) lifting an of about 5 kg (Table 5.6).

Table 5.6. Nagi Functioning Measures by Sex and Age

Nagi Functioning Measures	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who experience difficulty with the following activities								
Walk 200 to 300 meters	16.2	23.1	**	12.1	21.3	46.4	***	20.1
Climb 10 steps without resting	23.3	34.3	*	19.2	33.1	60.5	**	29.6
Stand (go without sitting) for 2 hours	41.1	57.0	***	40.6	56.9	73.8	***	50.2
Continue to sit for 2 hours	28.8	36.9	*	26.8	35.4	53.9	**	33.5
Stoop or bend your knees	26.8	38.3	*	25.4	33.6	60.6	**	33.4
Raise your hands above your head	9.7	12.3	n.s.	7.1	9.7	27.7	***	11.2
Extend arms out in front of you as if to shake hands	7.2	7.5	n.s.	4.4	6.3	19.5	*	7.4
Grasp your fingers or move your fingers easily	5.0	7.0	n.s.	3.5	6.2	15.3	**	6.2
Lift an object weighing approximately 10 kg	27.3	45.7	**	26.5	43.1	69.3	**	37.8
N	2,570	3,480		2,638	2,004	1,408		6,050
Lift an object weighing approximately 5 kg	42.4	47.7	n.s.	32.1	45.4	65.3	*	46.1
N	785	1,671		650	854	952		2,456
% who experienced difficulty in performing any of the 10 activities	54.1	70.6	*	54.2	69.8	86.8	***	63.6
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean number of Nagi activities with difficulty	2.39	3.48	***	1.85	3.06	5.18	***	2.79
N	1,781	2,307		1,828	1,321	939		4,088

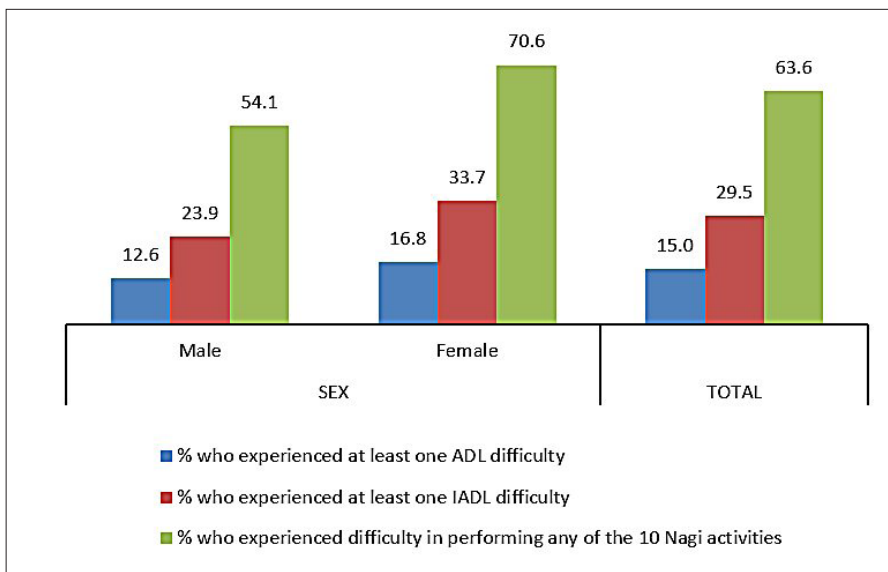
Sig = Statistical significance, * p < 0.05, ** p < 0.01, *** p < 0.001, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

The most difficult was standing (without sitting) for 2 hours for males (41.1%) and females (57.0%). The least difficult was grasping with fingers or moving fingers easily for males (5.0%) and females (7.0%). Many more females than males reported having difficulty with all 10 activities: walking 200–300 meters (23.1% vs. 16.2%), climbing 10 steps without resting (34.3% vs. 23.3%), standing (without sitting) for 2 hours (57.0% vs. 41.1%), sitting for 2 hours continuously (36.9% vs. 28.8%), stooping or bending the knees (38.3% vs. 26.8%), and lifting an object of about 10 kg (45.7% vs. 27.3%). Significantly more females than males had difficulty with at least one activity (70.6% vs. 54.1%). Females had more difficulty than males with significantly more activities.

OPs in all age groups had the most difficulty standing (without sitting) for 2 hours (60–69 years: 40.6%; 70–79: 56.9%; 80+: 73.8%), and the least difficulty grasping with fingers or moving fingers easily (60–69: 3.5%; 70–79: 6.2%; 80+: 15.2%). Significant differences in all 10 activities were found across age groups, with difficulty becoming more prevalent with advanced age. The percentage of having at least one difficulty increased to 86.8% amongst those aged 80+ years, 54.2% amongst those aged 60–69 years, and 69.8% amongst those aged 70–79 years. The average number of activities with difficulty differs significantly amongst age groups.

ADL vs IADL vs Nagi. Figure 5.1 displays functional health assessed by ADL and IADL difficulty and Nagi functional measures between sexes. The largest number of OPs – males and females – reported limitations assessed by Nagi functional measures, followed by OPs whose disabilities were assessed using IADL and ADL difficulty. OPs in all age groups have more Nagi functional limitations measures than IADL and ADL difficulties (Figure 5.2), which suggests that assessing functional health by using difficulty with ADL and IADL may underestimate poor functional health amongst older OPs.

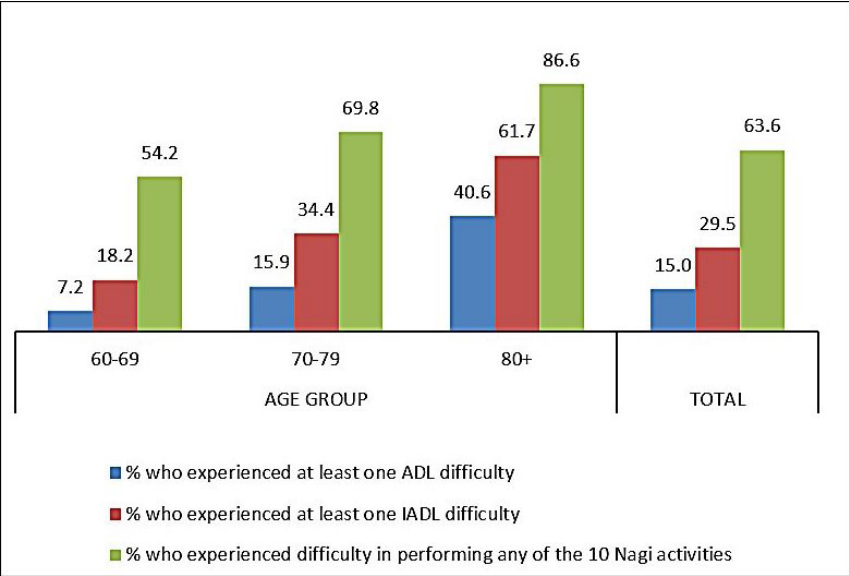
Figure 5.1. Functional Difficulty of Older Persons by Sex



ADL = activity of daily living, IADL = instrumental activity of daily living.

Source: Calculated by PHAD using original LSAHV data.

Figure 5.2. Functional Difficulty of Older Persons by Age



ADL = activity of daily living, IADL = instrumental activity of daily living.
Source: Calculated by PHAD using original LSAHV data.

Summary, Conclusions, and Recommendations

This chapter investigates functional health amongst OPs in Viet Nam. Females, in general, reported poorer functional health than males. Significant differences between sexes were found in difficulty with IADL (leaving home to purchase necessary items or medication, taking care of financial matters such as paying utilities, and using a telephone); WG-SS (remembering or concentrating); and Nagi functional measures (walking 200–300 meters, climbing 10 steps without resting, standing (without sitting) for 2 hours, sitting for 2 hours continuously, stooping or bending the knees, and lifting an object of about 10 kg). However, no obvious patterns in activities reached significant levels. ADL, IADL, WG-SS, GALI, and Nagi functional measures all indicated a clear upward trend in poorer functional health in all age groups. No significant differences in acute disability were observed amongst those bedridden in the previous 2 weeks by sex or age.

Functional health improves (Schoeni, Freedman, and Wallace, 2001) with concurrent increases in chronic conditions amongst OPs in high-income countries (Crimmins and Saito, 2000; Freedman, Schoeni, Martin, and Cornman, 2007), suggesting that interventions to promote health in later life are likely to pay off. Policies and innovative interventions need to target not only current OPs but also younger people because of the link between health in later life and earlier life experiences (Hubert, Bloch, Oehlert, and Fries, 2002).

References

- Chatterji, S., J. Byles, D. Cutler, T. Seeman, and E. Verdes (2015), 'Health, Functioning, and Disability in Older Adults – Present Status and Future Implications', *The Lancet*, 385, pp.563–75.
- Crimmins, E.M. and Y. Saito (2000), 'Change in the Prevalence of Diseases among Older Americans: 1984–1994', *Demographic Research*, 3.
- Freedman, V.A., R.F. Schoeni, L.G. Martin, and J.C. Cornman (2007), 'Chronic Conditions and the Decline in Late-Life Disability', *Demography*, 44, pp.459–77.
- Hsiao, R.-L., C.-H. Wu, C.-W. Hsu, Y. Saito, and Y.-H. Lin (2019), 'Validation of the Global Activity Limitation Indicator in Taiwan', *BMC Medical Research Methodology*, 19, p.52.
- Huber, M. et al. (2011), 'How Should We Define Health?' *BMJ (British Medical Journal)*, 343, p.d4163.
- Hubert, H.B., D.A. Bloch, J.W. Oehlert, and J.F. Fries (2002), 'Lifestyle Habits and Compression of Morbidity', *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 57, pp.M347–M351.
- James, S.L., et al. (2018), 'Global, Regional, and National Incidence, Prevalence, and Years Lived with Disability for 354 Diseases and Injuries for 195 Countries and Territories, 1990–2017: A Systematic Analysis for the Global Burden of Disease Study 2017', *The Lancet*, 392, pp.1789–858.
- Janke, M.C., T.Y. Chen, and T.L. Young (2015), 'Disablement', in S. K. Whitbourne (ed.), *The Encyclopedia of Adulthood and Ageing*. Hoboken, NJ: Wiley, pp. 1–5.
- Lordos, E.F., F.R. Herrmann, J.-M. Robine, M. Balahoczký, S.V. Giannelli, G. Gold, and J.-P. Michel (2008), 'Comparative Value of Medical Diagnosis versus Physical Functioning in Predicting the 6-Year Survival of 1951 Hospitalized Old Patients', *Rejuvenation Research*, 11(4), pp.829–36.

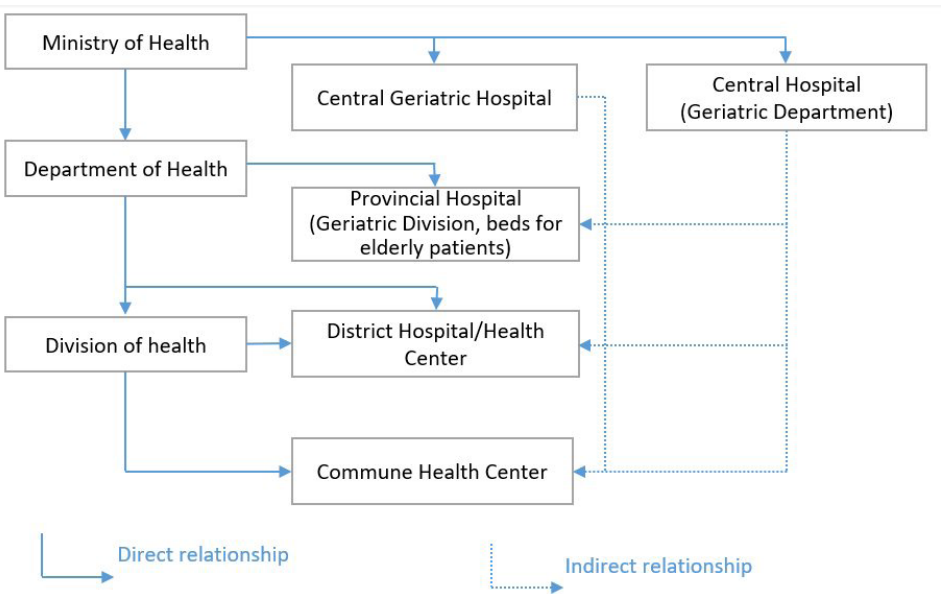
- Madans, J.H., B.M. Altman, E.K. Rasch, M. Mbogoni, M. Synneborn, J. Banda, A. Me, and E. DePalma (2004), 'Washington Group Position Paper: Proposed Purpose of an Internationally Comparable General Disability Measure'. Paper presented at the Third Meeting of the UN Washington Group on Disability Statistics, Brussels, Belgium.
- Schoeni, R.F., V.A. Freedman, and R.B. Wallace (2001), 'Persistent, Consistent, Widespread, and Robust? Another Look at Recent Trends in Old-age Disability', *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56, pp. S206–S218.
- Sullivan, D.F. (1971), 'A Single Index of Mortality and Morbidity', *HSMHA Health Reports*, 86, pp.347–54.
- United Nations Department of Economic and Social Affairs (UNDESA), Population Division (2013), *World Population Ageing 2013*. <https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2013.pdf> (accessed 10 January 2020).
- Van Oyen, H., P. Bogaert, R.T. Yokota, and N. Berger (2018), 'Measuring Disability: A Systematic Review of the Validity and Reliability of the Global Activity Limitations Indicator (GALI)', *Archives of Public Health*, 76(25), p.25.
- Verbrugge, L.M. (2016), 'Disability Experience and Measurement', *Journal of Aging and Health*, 28, pp.1124–58.
- Washington Group on Disability Statistics (2017), 'The Washington Group Short Set on Functioning (WG-SS)'. <http://www.washingtongroup-disability.com/wp-content/uploads/2016/12/WG-Document-2-The-Washington-Group-Short-Set-on-Functioning.pdf> (accessed 10 January 2020).
- World Health Organization (1946), 'Constitution of the World Health Organization', *American Journal of Public Health and the Nation's Health*, 36, pp.1315–23.

Healthcare and Healthcare Utilisation

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

Older persons (OPs) in Viet Nam carry a heavy burden of chronic diseases such as cancer, heart disease, stroke, diabetes, joint degeneration, stress, depression, amongst others, which require long-term and expensive treatment and care. OP care is influenced by factors such as number of diseases, risk of disability, and the healthcare system. Viet Nam has three levels of formal healthcare providers (Figure 6.1): central geriatric hospital, provincial hospital geriatric division, and district hospital or health centre. OPs also receive informal and kin-based healthcare.

Figure 6.1. Public Healthcare Management for Older Persons



Source: Research Project on Care for Older Persons in ASEAN+3 (2018).

The Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) includes information about OPs seeking healthcare from formal and informal sources in the recent past and about long-term care, which is a significant concern in ageing societies, including Viet Nam.

Formal Care

Formal care refers to healthcare provided by the healthcare system. The LSAHV examined two types of formal care: inpatient and outpatient care.

Inpatient Care Utilisation

Inpatient care refers to healthcare that requires the ill person to stay for an extended period in a health facility. The LSAHV defines utilisation of inpatient health services as having stayed at least overnight in a health facility in the 12 months preceding the survey (Table 6.1). A total of 21.9% of all OPs availed themselves of inpatient care within that time frame and the percentage increases with age. Amongst the oldest group (80+), about 26% stayed overnight in a health facility. The average number of times all OPs stayed in a facility was 2.27 in the previous year. The average number of hospital stays was almost the same for men and women and slightly increased with age. A small proportion stayed at private facilities (5%), with most staying at public facilities (94%).

OPs' answers to 'Who paid the most for the last hospitalisation?' reflect heavy reliance on children as informal financial support: 41.8% said their children paid the most whilst 37.0 % said they themselves or their spouse (13.9%).

About 90.2% of hospitalised OPs used national health insurance benefits thanks to the 2008 Law on Health Insurance (25/2008/QH12) and other regulations such as Government Regulation 68/2008/ND-CP, Prime Minister's Decision 485/2006/QD-TTg in 2006, the 2009 Law on the Elderly, and Decision 4858/QD-BYT 2013 of the Ministry of Health. This decision of the Ministry of Health includes 'the number of beds for elderly patients' in the criteria for assessing the quality of hospital services (Chapter 1).

Table 6.1. Inpatient Utilisation by Sex and Age

Inpatient Utilisation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who stayed overnight in a hospital/ other medical facility in the past year because of an illness/accident in the past 12 months	21.0	22.5	n.s.	20.4	22.6	26.0	n.s.	21.9
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean number of times stayed at least overnight in a hospital	2.10	2.40	n.s.	2.20	2.20	2.49	n.s.	2.27
N	439	600		403	367	269		1,039
Type of facility used the last time hospitalised								
Commune health centre	6.7	10.4		8.3	6.7	13.5		8.9
District hospital	41.0	42.9		41.8	40.1	44.4		42.1
Provincial general hospital	24.5	22.4		22.6	20.9	28.1		23.3
Provincial/specialty hospital	9.5	3.8		5.5	8.8	4.4		6.1
National general hospital	9.2	9.2	n.s.	10.2	9.9	5.7	n.s.	9.2
National specialty hospital	2.6	5.9		4.6	7.4	0.8		4.6
Private clinic	1.6	1.4		1.9	1.1	0.6		1.5
Private hospital	3.0	2.9		3.2	2.8	2.3		2.9
International hospital	0.9	0.04		0.5	0.4	0.1		0.4
Others	1.0	1.1		1.4	1.1	0.1		1.1
N	532	710		471	439	332		1,242
Who paid the most for the hospitalisation								
Respondent	36.9	37.0		43.4	33.2	24.3		37.0
Spouse	18.9	10.5		19.7	9.7	3.4		13.9
Children	32.9	47.8	n.s.	27.9	53.9	64.6	n.s.	41.8
Grandchildren	0.2	0.5		0.2	0.2	1.1		0.4
Other relatives	1.9	1.6		2.2	0.6	1.9		1.7
Others (e.g. pension)	9.2	2.6		6.7	2.5	4.8		5.2
N	533	710		471	437	335		1,243
% who received benefit from health insurance								
Yes	91.5	89.3		91.6	89.4	87.4		90.2
No	1.6	1.3	n.s.	1.7	1.3	0.7	n.s.	1.4
% Who have other insurance aside from health insurance	19.3	14.8	n.s.	14.1	18.3	21.6	n.s.	16.6
N	536	712		473	440	335		1,248
Who used discounts for senior citizens (%)	42.9	38.0	n.s.	35.1	33.9	61.4	n.s.	40.1
N	536	712		473	440	335		1,248

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Outpatient Care Utilisation

Slightly more OPs went for outpatient than inpatient care (Table 6.2). About 30% reported receiving medical care for an illness or accident in the previous 12 months without staying overnight in a medical facility (women: 29.7%; men: 26.6%). The percentage of OPs using outpatient services increases with age.

OP outpatients prefer public facilities (87%) over private facilities (13%). This utilisation pattern of outpatient care is similar to that of inpatient care. About 70% of those who received outpatient care saw a physician for most of their health problems.

Table 6.2. Outpatient Utilisation by Sex and Age

Outpatient Utilisation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who received medical care for an illness/accident from any medical facility or practitioner without staying overnight in the past 12 months	26.6	29.7	n.s.	25.8	31.3	33.1	n.s.	28.4
N	2,570	3,480		2,638	2,004	1,408		6,050
Type of facility visited most as an out-patient								
Commune health centre	38.8	43.0		37.5	42.4	50.0		41.3
District hospital	30.9	28.6		31.3	28.3	26.2		29.5
Provincial general hospital	10.2	7.7		8.4	9.7	8.0		8.7
Provincial or specialty hospital	5.4	2.6		3.8	5.5	1.0		3.7
National general hospital	3.7	3.1	n.s.	4.1	3.5	1.1	n.s.	3.3
National specialty hospital	1.4	1.3		1.8	0.3	1.5		1.3
Private clinic	4.7	6.4		6.2	3.7	7.1		5.7
Private hospital	2.6	4.1		3.2	5.0	2.2		3.5
International hospital	0.5	0.4		0.7	0.2	0.0		0.4
Others	1.9	2.8		3.0	1.4	2.4		2.4
N	677	1,043		699	598	423		1,720
Health practitioner seen most often for health problems								
Traditional practitioner	5.9	6.3		6.1	3.8	9.6		6.2
Doctor	67.5	66.2		70.4	65.0	59.1		66.7
Nurse	0.1	0.8	n.s.	0.3	1.1	0.4	n.s.	0.5
Midwife	0.0	0.0		0.0	0.0	0.0		0.0
Commune health worker	20.8	23.3		19.2	27.1	24.0		22.3
Others	2.8	3.4		2.3	2.3	3.8		2.6
N	662	1,030		685	586	421		1,692

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data..

Unmet Need for Healthcare

About 3 in 10 OPs received outpatient care in the previous year but not because they had low medical need: 13% of OPs reported that they felt ill in the previous 12 months but did not go to doctor (Table 6.3). The most common reason for not seeking medical care at that time was not having enough money (35.7%).

Table 6.3. Unmet Need for Healthcare by Sex and Age

Unmet Need for Health Care	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who felt ill and thought about seeing a doctor but did not in the past 12 months	12.7	12.8	n.s.	12.2	13.7	13.2	n.s.	12.7
N	2,570	3,480		2,638	2,004	1,408		6,050
% whose most important reason for not seeing a doctor is not having enough money	33.3	37.6	n.s.	36.8	32.2	37.7	n.s.	35.7
N	281	409		310	243	137		690

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Health Insurance Coverage

LSAHV data indicate that 91% of OPs have health insurance coverage. The national health insurance system is free for the poor (11.3%); ethnic minorities (11.3%); and 'merit' people such as veterans, Vietnamese Heroic Mothers, spouses of martyrs, and war invalids (37.5%); of insured OPs, 32.3% are covered by voluntary health insurance (Table 6.4). There is no sex or age difference in health insurance coverage, except for merit OPs and OPs insured by voluntary health insurance. Male merit OPs with health insurance make up a significantly higher proportion (45.3%) than their female counterparts (31.6%). As for OPs with voluntary health insurance, the percentage of coverage decreases with age. Merit OPs in the oldest age group (80+) make up the highest proportion of OPs with health insurance (42%).

Table 6.4. Health Insurance Coverage by Sex and Age

Health Insurance Coverage	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who have health insurance	91.1	90.9	n.s.	89.6	91.4	95.1	n.s.	91.0
<i>N</i>	2,570	3,480		2,638	2,004	1,408		6,050
Type of health insurance								
For poor people	8.4	13.4	n.s.	9.3	14.8	12.8	n.s.	11.3
For ethnic minority	10.0	12.3	n.s.	11.7	9.8	11.9	n.s.	11.3
For merit people	45.3	31.6	*	34.3	41.5	42.0	n.s.	37.5
Compulsory	3.6	4.0	n.s.	4.2	3.0	3.5	n.s.	3.8
Voluntary	29.9	34.1	n.s.	38.1	29.6	17.1	*	32.3
Private	1.4	1.4	n.s.	1.5	1.3	1.2	n.s.	1.4
<i>N</i>	2,303	3,110		2,305	1,793	1,315		5,413

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Public Health Services for Older Persons

The law on the elderly (39/2009/QH12), adopted on 1 July 2010, defines the rights and obligations of OPs:

- (1) OPs who are 80+ are served first in hospitals and clinics, except children's hospitals.
- (2) Geriatric departments must provide beds for OPs.
- (3) Healthcare centres and communities are responsible for OPs' primary healthcare.
- (4) OPs who are 80+ and do not have a pension receive a monthly allowance and free health insurance.
- (5) Poor OPs who do not have relatives and are not in good health can stay in nursing homes and are provided with free food, free care, medicines, and rehabilitation, and with funeral service when they die.

Level of Use and Source of Medicines for Hypertension and Diabetes

Because of ageing and lifestyle changes, more OPs are being diagnosed with hypertension (HTN) and/or diabetes. Of OPs diagnosed with HTN, 85.9% are taking medications and about 70% obtain them from health centres (Table 6.5). Of OPs diagnosed with diabetes, 86.5% take medications and 80.8% receive them from health centres all the time.

Table 6.5. Level of Use and Source of Medicines and Supplements by Sex and Age

Level of Use and Source of Medicines and Supplements	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who take any medicine for:								
High blood pressure	83.0	87.8	n.s.	83.9	88.0	87.7	n.s.	85.9
N	1,006	1,500		875	942	689		2,506
Diabetes	80.3	90.3	n.s.	90.1	77.5	88.9	n.s.	86.5
N	210	350		243	230	87		560
% who get medicine from health center(s) all the time								
High blood pressure	66.7	71.9	n.s.	69.7	71.9	66.8	n.s.	69.8
N	1,006	1,500		875	942	689		2,506
Diabetes	78.1	82.5	n.s.	86.8	68.4	82.5	n.s.	80.8
N	210	350		243	230	87		560
% taking any supplement	10.3	11.3	n.s.	9.8	11.2	13.9	n.s.	10.9
N	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

We asked OPs whether they were taking supplements such as multivitamins, antioxidants, and food supplements. Only 10.9% said they were. Women (11.3%) were more likely to report taking supplements than men (10.3%). Although the proportion of OPs taking a supplement increased with age, the difference was not significant (60–69 years: 9.8%; 70–79: 11.2%; and 80+: 13.9%).

Informal Care

Informal healthcare refers to care received from kin and others when one is ill. We asked the OPs to identify who usually took care of them when they were sick from when they turned 60 to the time of the survey.

The most commonly cited person is the spouse (40.8%) but there is a clear disparity between men and women: more men (61.1%) than women (25.5%) are more likely to name their spouse. More women (36.1%) than men (23.7%) report a son as their principal caregiver.

Table 6.6. Person Who Usually Takes Care of Older Person When He/She is Sick Since Age 60 by Sex and Age

Person Who Usually Takes Care of Older Person	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Spouse	61.1	25.5		49.3	36.3	17.1		40.8
Son	23.7	36.1		27.0	32.4	41.5		30.7
Daughter	8.0	16.9		9.4	16.6	20.7		13.1
Daughter-in-law	1.6	8.3		3.8	6.0	10.2		5.4
Son-in-law	0.2	0.0	***	0.0	0.2	0.1	n.s.	0.1
Grandchild	0.5	1.7		0.7	1.2	2.9		1.2
Other relatives	0.8	2.8		2.3	1.7	1.0		1.9
None/Self	2.0	4.3		4.1	2.5	1.8		3.3
Helper	0.0	0.3		0.0	0.2	0.7		0.2
Others	0.5	1.2		0.8	1.0	1.1		0.9
<i>N</i>	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

The percentage of OPs cared for by a spouse decreases with age and the percentage of sons as caregivers increases with age (Table 6.6). The reasons are age-related changes in marital composition (increasing widowhood), differential mortality patterns of men and women (women live longer), and parents living with a son's rather than a daughter's family. Caregiving for OPs is mostly a male role.

Long-term Care

The LSAHV is the first ageing survey in Viet Nam to explore the issue of long-term care (LTC), which 'covers those activities undertaken by others to ensure that people with, or at risk of, a significant ongoing loss of intrinsic capacity can maintain a level of functional ability consistent with their basic rights, fundamental freedoms and human dignity' (World Health Organization, 2017: 2). LTC is nonmedical care provided to those who need continuous assistance in performing the basic activities of daily living.

Long-term Care: Current Practice

Of the 5,354 OPs in the LSAHV sample, 1,118 or 20.4% are receiving care because of a continuing health condition. Slightly more male than female OPs receive LTC (21.3% vs. 19.8%). The number of OPs receiving LTC increases with age (60-69: 16.1%; 70-79: 24.1%; and 80+: 34.3%). 86% of them require daily care (Table 6.7).

Table 6.7. Long-term Care by Sex and Age

Long-term Care	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% currently receiving care because of continuing condition of ill health or disability	21.3	19.8	n.s.	16.1	24.1	34.3	*	20.4
<i>N</i>	2,361	2,993		2,530	1,833	991		5354
Person mainly taking care of older person								
Spouse	67.6	25.3		59.4	38.4	21.3		44.9
Son	22.3	38.4		24.8	35.1	39.5		31.0
Daughter	5.5	20.7		8.6	15.6	22.4		13.7
Daughter-in-law	2.5	10.1	**	3.7	8.4	10.5	n.s.	6.6
Son-in-law	0.0	0.3		0.1	0.0	0.5		0.2
Grandchild	0.3	2.1		0.7	1.8	1.8		1.3
Other relatives	1.2	2.2		1.9	0.4	3.1		1.7
House help	0.2	0.3		0.1	0.2	0.5		0.2
Others	0.1	0.6		0.5	0.1	0.4		0.4
<i>N</i>	490	628		375	413	330		1,118
Frequency of care given								
Every day	91.3	82.1		86.3	87.6	84.6		86.3
Every few days	3.9	9.0	n.s.	6.9	6.0	7.0	n.s.	6.7
Every week	1.8	2.5		1.9	2.2	2.9		2.2
Every month	1.2	2.5		1.4	1.7	3.4		1.9
Every few months	1.7	3.4		3.3	2.4	1.4		2.6
<i>N</i>	490	628		375	413	330		1,118
Kind of care provided								
Preparation of food	86.9	73.9		73.8	84.3	87.6		79.9
Give medicine	47.4	44.8		43.4	50.3	46.2		46.0
Self-care (e.g., bathing, washing)	28.2	23.6	n.s.	25.6	24.7	27.5	n.s.	25.7
Getting up from bed/chair	15.0	13.3		15.2	12.0	14.3		14.1
Assist in moving around	20.5	21.9		20.9	18.6	25.7		21.3
Others	5.7	8.3		8.6	6.8	4.4		7.1
<i>N</i>	490	628		375	413	330		1,118
Person older persons would like to receive care from in case older person will have dementia								
Spouse	51.2	19.5		40.0	27.2	14.4		33.5
Son	31.9	42.8		34.2	43.3	46.0		38.0
Daughter	10.9	22.5		15.1	19.6	23.7		17.3
Daughter-in-law	1.2	7.3	***	4.0	4.6	7.7	n.s.	4.6
Son-in-law	0.0	0.0		0.0	0.0	0.1		0.0
House helper	0.0	0.0		0.0	0.1	0.1		0.0
Health staffs	0.2	0.5		0.4	0.4	0.6		0.4
Nursing home staff	0.1	0.5		0.4	0.1	0.4		0.3
Others	1.0	2.6		1.8	1.7	2.7		1.9
Not sure	3.0	3.8		3.5	3.1	3.9		3.5
<i>N</i>	2,361	2,993		2,530	1,933	999		5,354

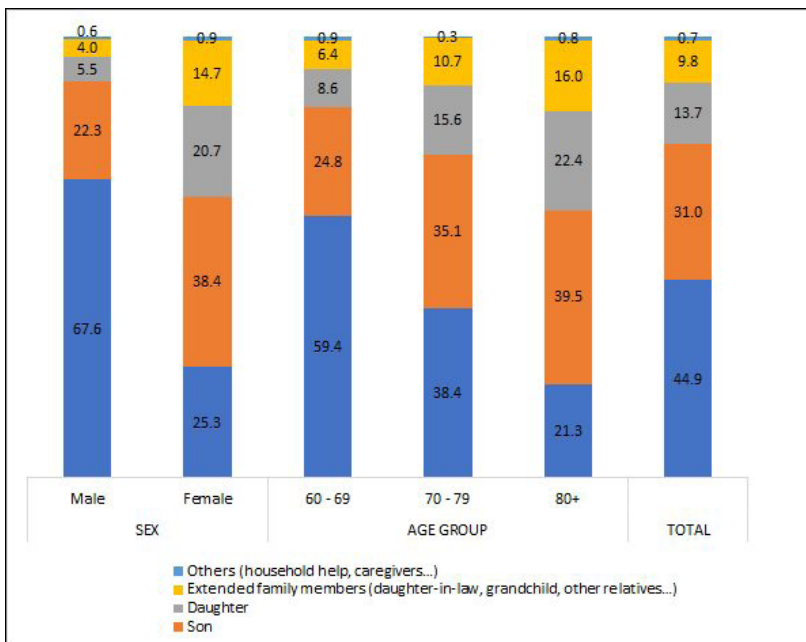
Long-term Care	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Person who will most likely take care of older person in case older persons will have dementia								
Spouse	47.9	17.8		37.7	24.0	13.3		31.2
Son	34.1	42.9		35.5	43.5	47.1		39.0
Daughter	11.3	23.3		15.7	20.9	22.9		18.0
Daughter-in-law	1.9	8.2	**	4.4	5.8	9.4	n.s.	5.4
Son-in-law	0.0	0.2		0.1	0.0	0.1		0.1
House helper	0.4	0.2		0.3	0.3	0.2		0.3
Health staffs	0.3	0.4		0.4	0.2	0.3		0.4
Nursing home staff	0.3	0.6		0.6	0.2	0.6		0.5
Others	0.5	2.5		1.3	2.0	2.5		1.6
Not sure	3.0	3.6		3.4	2.9	3.3		3.3
N	2,361	2,993		2,530	1,933	999		5,354
Person older person would like to receive care from in case older person becomes invalid or bedridden								
Spouse	49.5	17.5		38.8	23.8	12.7		31.6
Son	32.8	40.6		32.8	43.1	46.4		37.1
Daughter	11.5	25.9		17.6	22.0	24.5		19.6
Daughter-in-law	1.5	8.4	**	4.4	5.8	8.7	n.s.	5.3
Son-in-law	0.1	0.0		0.1	0.0	0.1		0.1
House helper	0.3	0.1		0.1	0.2	0.7		0.2
Health staffs	0.2	0.5		0.3	0.3	0.4		0.3
Nursing home staff	0.5	0.7		0.7	0.2	0.5		0.6
Others	0.4	2.6		1.4	1.8	2.6		1.6
Not sure	3.0	3.5		3.5	2.8	3.1		3.3
N	2,361	2,993		2,530	1,933	999		5,354
Person who will most likely take care of older person in case older person becomes invalid or bedridden								
Spouse	45.7	16.3		35.6	22.6	12.2		29.3
Son	35.3	42.7		36.3	43.2	47.0		39.4
Daughter	12.4	24.2		16.7	22.2	23.8		19.0
Daughter-in-law	2.0	8.6		4.5	6.5	9.6		5.7
Son-in-law	0.0	0.2	**	0.1	0.0	0.1	n.s.	0.1
House helper	0.2	0.2		0.1	0.2	0.3		0.2
Health staffs	0.2	0.6		0.5	0.3	0.3		0.4
Nursing home staff	0.3	0.6		0.6	0.1	0.5		0.5
Others	0.8	2.6		1.6	1.8	2.7		1.8
Not sure	2.9	3.6		3.4	3.0	3.3		3.3
N	2,361	2,993		2,530	1,933	999		5,354

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAV data.

The percentage distribution of the LTC giver is much like that of the usual caregiver of the OP during illness since age 60 (Figure 6.2). The three most common LTC givers are spouse (44.9%), son (31.0%), and daughter (13.7%); the proportions are similar to those of short-term caregivers. Males receiving LTC mostly have their spouse as caregivers (67.6%) whilst women have a son caring for them (38.4%). Members of the nuclear family (spouse and children) provide about 90% of LTC, whilst the extended family – grandchildren, daughter-in-law, and sibling – provides 9.8%. People who are not family, such as household help, caregivers, and friends, make up 1% of primary caregivers.

Figure 6.2. Distribution of Main Caregivers of Older Persons Currently Under Long-term Care by Sex and Age (%)



Source: Calculated by PHAD using original LSAHV data.

Future Long-term Care

As OPs age, the probability of their requiring care by others increases. The common reasons for needing LTC are dementia and being bedridden, which is commonly a consequence of a stroke, a fall, or both.

We asked OPs not under LTC from whom they would prefer to receive care if they developed dementia or became bedridden or invalids. The profile of the preferred caregivers is the same as that of the caregivers of OPs who were under LTC at the time of the survey. The three most preferred caregivers are son, spouse, and daughter, in that order, which reveals traditional culture, where OPs heavily rely on sons for financial, mental, and daily care.

We asked OPs who would most likely care for them if they developed dementia or became bedridden or an invalid. The preferred and most likely caregivers are similar in both situations, except for a slightly higher percentage of 'Not sure' responses to the second question. Not many OPs mentioned LTC givers or facilities that are prevalent in more advanced ageing societies, such as house helpers, health staff, and nursing homes. Few OPs (0.1%) prefer to receive LTC from a son-in-law. Evidently, provision of future LTC remains a family responsibility dominated by males, which is based in traditional culture and family structure.

Summary, Conclusions, and Recommendations

Most OPs seek healthcare from public facilities, with only a small percentage going to private facilities for inpatient and outpatient care. Almost all OPs who were hospitalised in the 12 months before the survey availed themselves of health insurance benefits either as members or dependents. Health insurance is free only for the poor, ethnic minorities, and merit people. Of OPs who were hospitalised, one-third said most of the hospitalisation expenses were paid by themselves or their children. Because of the lack of financial resources, two in five OPs are constrained from consulting a physician when they need outpatient services.

Because OPs are highly aware of HTN and diabetes, 85.9% of diagnosed hypertensives and 86.5% of diagnosed diabetics take medication for their conditions. Of these, 69.8% of OPs with HTN and 80.8% with diabetes receive their medication from public health facilities all the time.

Amongst all OPs, 20.4% are under LTC, with mostly a spouse, son, or daughter as the main caregiver, in that order. Men are commonly cared for by their spouse, whilst women are mostly cared for by their son. LTC is provided for the most part by close family members. The profiles of preferred and current caregivers are the same, mostly sons, spouses, and daughters, in that order. In a culture that prefers sons, such as Viet Nam, OPs rely on sons rather than people who are not members of the family or on institutional facilities such as nursing homes.

The following recommendations may be considered:

- (1) Provide education and training programmes on geriatric care for caregivers who are family members of OPs and living in the household or who are volunteers to ensure that OPs receive the best in- and outpatient care.
- (2) Improve treatments for chronic diseases, especially HTN and diabetes. Make sure all chronically ill OP patients have sufficient, good, and affordable health service.
- (3) Develop policies that can be adapted to the ageing population to ensure that OPs have easy access to healthcare facilities and receive free medications and hospitalisation. The policies' implementation must be monitored and evaluated and its progress reported.
- (4) Develop an LTC policy and integrate it with other policies. Encourage the private sector to invest in LTC facilities by offering low rent for government land and tax exemption.
- (5) Extend health insurance to all OPs. They can pay different premiums depending on their income. This policy will help the near-poor.

References

- Government of Viet Nam (2008), *Government Regulation No. 68/2008/NĐ-CP*.
Ministry of Health (Viet Nam) (2013), *Decision on Criteria for Evaluating Hospital Quality*. Decision No. 4858/QĐ-BYT.
- National Assembly of the Socialist Republic of Vietnam (2008), *The Law on Health Insurance*. Law No. 25/2008/QH12.
- National Assembly of the Socialist Republic of Vietnam (2009), *The Law on the Elderly*. Law No. 39/2009/QH12.

- Prime Minister (Viet Nam) (2006), *Government Decision No.485/2006/QĐ-TTg*.
- Research Project on Care for Older Persons in ASEAN+3 (2018), The Role of Families and Local and National Support Systems. Bangkok. https://www.duke-nus.edu.sg/docs/librariesprovider3/research-policy-brief-docs/care-for-older-persons-in-asean-3---the-role-of-families-and-local-and-national-support-systems.pdf?sfvrsn=5830f2be_4 (accessed 13 November 2019).
- Tran, T.B.N., G.A. Barysheva, and L.S. Shpekht (2016), 'The Care of Elderly People in Vietnam', *The European Proceedings of Social & Behavioural Science*. eISSN: 2357-1330.
- World Health Organization (WHO) (2017), *WHO Series on Long-term Care: Towards Long-term Care Systems in Sub-Saharan Africa*. Geneva, Switzerland: WHO.

Economic Well-being of Older Persons

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

Generally, when people get older, their health becomes poorer, and their working capacity decreases. Ageing is often associated with a decline in full participation in economically productive activities, which directly affects the economic well-being of older persons (OPs) and is one of three dimensions of their well-being. Measuring OPs' economic well-being is complex and faces many issues, both conceptual and operational (Clark, 1989; Hermalin et al., 2002). To measure OPs' economic well-being, various dimensions can be operationalised and used in analyses. The asset and debt situation of OPs is considered the major determinant of their ability to secure essential resources and is critical for OPs after retirement. Assets may serve as sources of income, whilst portions of income will be funnelled into paying off debts.

The other two dimensions of well-being are activity levels (work, retirement, and leisure) and health (physical, mental, and emotional). The three dimensions of well-being influence each other (Hermalin et al., 2002: 300). Understanding them is essential for policymakers to ensure OPs' well-being. This chapter presents an overview of the economic well-being of OPs by examining their income sources and levels; discusses OPs' asset and debt situation; and assesses economic well-being in terms of reported adequacy of household income now and when the OPs were growing up, until age 16.

Income, Assets, and Liabilities

Table 7.1 shows the sources of income of OPs and spouses (if alive at the time of the interview). The three most common income sources are children in the country (38.5%), earnings from work (37.3%), and pension (23.8%); 15.9% of OPs receive government subsidies, implying that government financial support is important. Only 2.3% of OPs earn income from farms because they cannot work as much.

More men than women reported earnings from their own work, pension, farm, and property and real estate rentals. More women than men received income from their children living in and outside the country, from other relatives outside the household, and from friends. This interesting phenomenon may be because mothers have closer bonds with children than fathers do. Unsurprisingly, income of the oldest group (80+) is mostly from children in the country (47.8%) and government subsidies (46.3%).

Table 7.1. Sources of Income and Median Monthly Income by Sex and Age

Sources of Income	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Sources of income								
Earnings from work	41.2	34.3	n.s.	48.2	27.1	14.3	*	37.3
Pension	28.3	20.4	n.s.	23.1	29.1	18.3	n.s.	23.8
Government Subsidy	16.7	15.4	n.s.	7.9	14.3	46.3	***	15.9
Interest of time deposits, savings, and earnings from stocks	2.9	2.2	n.s.	2.9	2.2	1.7	n.s.	2.6
From property and real estate rentals	3.8	2.5	n.s.	3.8	2.2	1.8	n.s.	3.1
Income from family business	12.5	9.5	n.s.	13.8	8.0	4.3	*	10.8
Income from farm	2.5	2.3	n.s.	3.2	1.7	0.5	n.s.	2.3
Money from children within the country	34.0	41.8	n.s.	34.1	42.4	47.8	n.s.	38.5
Money from children outside the country	2.8	3.7	n.s.	2.7	4.2	4.3	n.s.	3.3
Money from other relatives outside the household	2.5	3.2	n.s.	2.7	3.0	3.5	n.s.	2.9
Money from friends	0.5	0.5	n.s.	0.4	0.6	0.9	n.s.	0.5
N	2,567	3,476		2,632	2,003	1,408		6,043
Mean number of sources of income	1.46	1.35	***	1.42	1.36	1.42	**	1.40
N	2,567	3,476		2,632	2,003	1,408		6,043
Annual household income in the past 12 months (VND)								
<2,000,000	10.2	12.4		10.0	11.0	16.9		11.4
2,000,000–<10,000,000	23.2	26.5		24.0	26.1	27.1		25.1
10,000,000–<50,000,000	31.1	26.2		29.3	29.7	22.9		28.3
50,000,000–<100,000,000	14.2	10.8	n.s.	14.1	10.1	9.0	n.s.	12.2
100,000,000–300,000,000	5.7	4.2		5.8	4.2	2.6		4.9
>300,000,000	1.3	1.2		1.5	1.2	0.7		1.3
Don't know	14.4	18.8		15.4	17.8	20.8		16.9
N	2,563	3,469		2,626	2,000	1,406		6,032

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Earnings from work are the second most common income source. A higher proportion of male than female OPs work (41.2% vs. 34.3%). The youngest reported that 48.2% of them are still working and that their work is their main source of income, raising the question, 'Should the retirement age be increased?' The retirement age is 55 years for women and 60 for men. Because of the ageing population, the National Assembly approved a new retirement age: starting 2021, the retirement age for men will gradually be increased to 62 by 2028, and for women to 60 by 2035.

The third most important source of income is the pension, which may be a retirement allowance. OPs 80+ years old and poor OPs receive a monthly subsidy of VND270,000 (about US\$12) (Decree 136/2013/NĐ-CP, Article 4, Clause 1). Because of the increase in living cost, the assistance is insufficient. The General Statistics Office of Vietnam in 2013 reported that more than 68.2% of OPs (6.15 million) lived in rural areas, only 16%–17% of them received pensions, and 10% received social benefits (Nguyen, 2008). Although a small number of OPs receive social benefits, retirement funds, and old-age pensions, these types of funding are increasing as the population ages. The money is placed in the social security fund, but the pension system has its own problems and a stable financial system is needed to manage it (Tran et al., 2016).

Including all income sources, 28.3% of OPs had an annual household income for the previous 12 months of VND10 million–VND50 million. Male OPs' contribution to annual household income is higher than female OPs' (31.1% vs. 26.2%). OPs' annual household income is slightly lower than other households'. The General Statistics Office of Viet Nam states that the average annual household income is about VND60 million (about US\$2,500). About 37% of OPs have an annual household income of less than VND10 million (about US\$430). Only a small proportion of them (6.2%) have the highest annual household income of more than VND100 million (about US\$4,300). Some OPs (11.4%) have a very low annual household income. More females than males are in the lower-income group (earning less than VND10 million), and more males than females are in the higher-income group (earning more than VND100 million). A large number of OPs (16.9%) said they do not know what their annual household income.

We asked OPs which source of income was the most important to them. Earnings from work (31.5%) are the most mentioned, particularly by the youngest age group (39.6%) (Table 7.2). The second and third most mentioned are pensions (22.5%) and children living in the country (20%). The oldest (80+) receive more income from children living in the country (32.5%) than the youngest (15.7%).

Table 7.2. Most Important Source of Income by Sex and Age

Sources of Income	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Earnings from work	34.1	29.4		39.6	22.0	11.2		31.5
Pension	24.8	20.6		20.5	28.6	20.4		22.5
Government Subsidies	7.8	7.6		3.7	8.8	24.4		7.7
Interest of time deposits, savings, and earnings from stocks	0.9	1.2		1.3	0.7	0.6		1.0
From property and real estate rentals	2.0	1.7		2.1	1.6	1.0		1.8
Income from family business	9.2	6.6		9.5	5.8	3.3		7.7
Income from farm	1.1	1.1	n.s.	1.4	0.6	0.8	*	1.1
Money from children within the country	15.6	23.5		15.7	24.2	32.5		20.0
Money from children outside the country	1.3	1.5		1.2	1.8	1.9		1.4
Money from other relatives outside the household	0.3	1.9		1.3	1.3	0.6		1.2
Money from friends	0.0	0.2		0.1	0.2	0.0		0.1
Don't know	2.8	4.7		3.8	4.4	3.4		3.9
N	2,353	2,969		2,515	1,823	986		5,324

Sig = Statistical significance, * p < 0.05, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Besides income, LSAHV indicators of economic well-being include possession of economic assets and liabilities. Assets are tangible (physical), and either financial (e.g. cash, savings in bank accounts, business investments) or non-financial (e.g. house, other real estate, farm or fishpond, jewellery, appliances, motor vehicle). We asked OPs if they owned any of the assets in a list. Nearly all have at least one asset, with more men than women reporting at least one asset (Table 7.3). Contrary to the general notion that wealth is accumulated over time, the proportion of OPs with assets declines with advancing age. The most common non-financial asset is the house where the OP resides (85.5%), followed by appliances (55.7%), cash (46.5%), and motor vehicles (40.1%); 15% of OPs own real estate – a house and/or lot other

than their place of residence. More men than women own tangible non-financial assets (the house they reside in, appliances, motor vehicles), but more women than men invest in jewellery and cell phones. The percentages of OPs owning a house, jewellery, appliances, and motor vehicles decline significantly with increasing age.

We explored OPs' liabilities. Only 5.6% of OPs reported having debts, with slightly more men (6.2%) than women (5.2%) in debt. We observed an age gradient, with more OPs in the youngest age group (8%) than in the older age groups reporting liabilities (70–79: 3.3%; 80+: 0.7%). The most common liability is a bank loan (84.1%), followed by a personal loan (11.8%). More men than women reported having a bank loan.

Table 7.3. Assets and liabilities by Sex and Age

Assets and Liabilities	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% with assets	96.8	93.1	n.s.	97.1	94.7	86.0	*	94.7
N	2,570	3,480		2,638	2,004	1,408		6,050
House currently residing in	89.8	82.4	n.s.	91.6	83.4	67.5	*	85.5
Other real estate	15.0	14.9	n.s.	17.3	13.2	9.6	n.s.	15.0
Cash	47.0	46.0	n.s.	48.3	45.0	42.2	n.s.	46.5
Savings in the bank	8.4	5.7	n.s.	7.9	6.3	4.0	n.s.	6.9
Farm/Fishpond	4.8	2.3	n.s.	3.4	3.9	2.4	n.s.	3.4
Business	4.8	3.8	n.s.	5.7	2.6	1.4	n.s.	4.2
Jewelry	10.7	12.3	n.s.	13.1	11.3	6.9	*	11.6
Appliances	58.6	53.5	n.s.	60.9	55.6	38.0	**	55.7
Motor vehicles	49.2	33.4	n.s.	51.5	29.7	15.8	**	40.1
Others (cellphones, etc.)	1.9	2.0	n.s.	1.8	2.6	1.8	n.s.	2.0
N	2,567	3,476		2,632	2,003	1,408		6,043
% with liabilities	6.2	5.2	n.s.	8.0	3.3	0.7	*	5.6
N	2,570	3,480		2,638	2,004	1,408		6,050
Bank loans	88.3	80.3		84.2	81.7	93.4		84.1
Personal loans	9.1	14.3		12.7	8.6	0.0		11.8
Amortisation for housing	1.1	0.0		0.6	0.0	0.0		0.5
Loans from moneylenders, pawnshops, credit unions, cooperatives	0.7	0.3	n.s.	0.4	0.0	6.6	n.s.	0.5
Loans from government	1.3	3.4		2.4	1.9	6.6		2.4
Others (car loan, home credit, etc.)	2.7	1.5		1.2	7.7	0.0		2.1
N	110	128		165	62	11		238

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

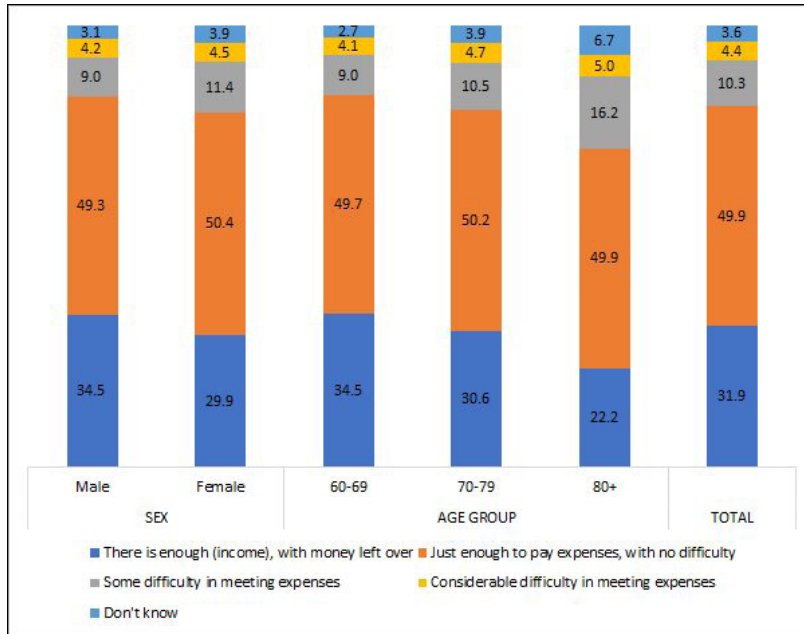
Self-rated Adequacy of Household Income

We asked OPs if their household income was sufficient to meet everyday expenses. Household income refers to the pooled income of all earning members of the household, not just the OPs' income. The response categories were (i) enough income with money left over, (ii) just enough to pay expenses with no difficulty, (iii) some problem meeting expenses, and (iv) considerable difficulty meeting expenses.

Figure 7.1 shows that 31.9% say they have enough money with some left over, whilst nearly half (49.9%) report that their household income is just enough to pay expenses with no difficulty. A small proportion (10.3%) report some difficulty meeting household expenses, whilst only 4.4% say they have considerable trouble meeting expenses. A similar pattern of self-assessed economic well-being is observed by sex and age.

An age gradient exists, however, amongst those who reported having enough money with some left over, with the proportion shrinking with increasing age. About 35% of the youngest age group (60–69) and 22% of the oldest age group (80+) report having enough money with some left over.

We asked OPs who reported having some or considerable difficulty meeting household expenses about their main source of funds to meet the shortfall in income: 35.4% have other sources of funds, which are not listed, whilst 22.7% ask for money from their children not living in their household, with no gender difference (Table 7.4). One in every four OPs (26.4%) answered, 'Don't know', which is hard to explain. That might mean they do not know from whom or where they can borrow money or they do not want to borrow money will change their lifestyle accordingly.

Figure 7.1. Self-assessed Economic Well-being by Sex and Age (%)

Source: Calculated by PHAD using original LSAHV data.

Table 7.4. Sufficiency of Household Income by Sex and Age

Sources of funds to meet income shortfall	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Draw from savings of older person and spouse	1.8	0.4		0.8	1.6	0.7		1.0
Request more money from children	22.7	22.8		20.8	26.1	23.8		22.7
Sell assets	1.3	1.6		1.4	1.7	1.5		1.5
Borrow from relatives/friends	9.3	7.5	n.s.	9.9	6.2	6.1	n.s.	8.2
Borrow from money lenders	1.6	1.8		1.0	3.5	1.4		1.7
Borrow from bank	3.7	2.6		4.4	1.0	1.9		3.1
Others	34.4	36.1		40.6	26.2	32.9		35.4
Don't know	25.3	27.1		21.2	33.8	31.6		26.4
N	272	445		305	263	149		717

Sig = Statistical significance, n.s. = not significant

Source: Calculated by PHAD using original LSAHV data.

To obtain a perspective on the current economic situation of the OPs, we asked them about their early economic status, particularly if their family was financially well-off, about average, or poor when they were growing up (from birth to age 16). More than half the OPs’ families were financially average, whilst about 42.1% were poor and only 2.8% well off. No significant disparities were observed across sex and age (Table 7.5).

Table 7.5. Self-assessed Economic Well-being Whilst Growing Up by Sex and Age

Economic Well-being	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
From birth to age 16								
Pretty well-off	3.7	2.2	n.s.	3.1	2.1	3.2	n.s.	2.8
Average	54.4	53.6		55.3	52.8	49.6		54.0
Poor	40.8	43.1		40.6	43.9	45.8		42.1
Don't know	1.1	1.1		1.0	1.2	1.3		1.1
N	2,331	2,954		2,488	1,816	981		5,285

Sig = Statistical significance, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Summary, Conclusion, and Recommendations

The OPs were of average overall economic well-being by both objective and subjective measures. Although two in five OPs lived in poverty in their early years, most have at least one asset and a very low percentage of liabilities.

The OPs’ main income comes from their work, especially for the youngest group. As dependence on work income drops noticeably with advancing age, the proportion that relies on transfers from children and on pension benefits increases. Pension benefits are a stable income source but below subsistence levels. The OPs, especially those 80+, rely heavily on children as their primary source of income.

As they age, the OPs rely more on their children for financial support. Policymakers should implement policies that can improve the economic status of both the OPs and their adult children. Policymakers can consider increasing the minimum wage and creating more jobs for OPs so they can be more financially independent. Young people should be educated to prepare themselves for retirement.

References

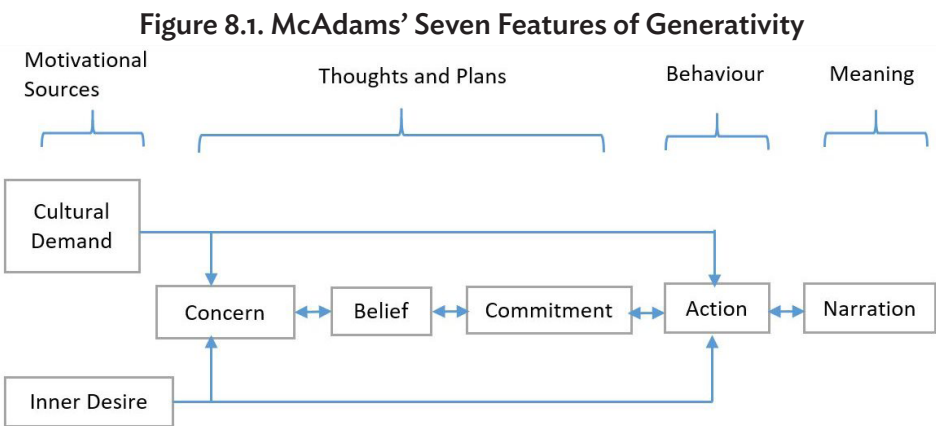
- Clark, R.L. (1989), 'Economic Well-being of the Elderly: Theory and Measurement', *Journal of Cross-Cultural Gerontology*, 4(1), pp.19–34.
- Hermalin, A.I. (2002), 'Theoretical Perspectives, Measurement Issues and Related Research', in A. I. Hermalin (ed.) *The Well-being of the Elderly in Asia: A Four-country Comparative Study*. Ann Arbor, MI: University of Michigan Press, pp.101–132.
- Hermalin, A.I., M.-C. Chang, and C. Roan (2002), 'Economic Well-being: Insights from Multiple Measures of Income and Assets', in A. I. Hermalin (ed.) *The Well-being of the Elderly in Asia: A Four-country Comparative Study*. Ann Arbor, MI: University of Michigan Press, pp.295–360.
- Nguyen D.C. (2008), 'Cơ cấu dân số Việt Nam có gì mới' [What's new in Vietnam's population structure review], <http://www.tapchicongsan.org.vn/Home/Nghiencuu-Traodoi/2008/3555/Co-cau-dan-so-Viet-Nam-co-gi-moi.aspx> (accessed 17 December 2019).
- Tran T.B.N., G.A. Barysheva, and L.S. Shpekht (2016), 'The Care of Elderly People in Vietnam', *The European Proceedings of Social & Behavioural Sciences*. doi: [10.15405/epsbs.2016.02.63](https://doi.org/10.15405/epsbs.2016.02.63) (accessed 17 December 2019).
- Government of Viet Nam (2013), Decree 136/2013/NĐ-CP.

Viet Nam Online (2019), 'Bộ LĐ-TB&XH đề xuất 2 phương án tăng tuổi nghỉ hưu từ năm 2021' [MOLISA proposes 2 options to increase the retirement age from 2021]. <http://thoibaotaichinhvietnam.vn/pages/xahoi/2019-04-29/bo-ld-tb-xh-de-xuat-2-phuong-an-tang-tuoi-nghi-huu-tu-nam-2021-70766.aspx> (accessed 17 December 2019).

Generativity, Attitudes, and Beliefs

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

In ageing studies, the quality of life of older persons (OPs) is an important factor in maintaining one’s psychological health. To evaluate the quality of an older adult’s life, the generativity is explored. The concept of generativity was first introduced by Eric Erikson in 1950. He defined generativity as a concern for others and a need to contribute something to the next generation (Erikson, 1977). He also proposed eight stages of the life cycle from infancy to the end of one’s life. At each stage, he contrasted generativity with the stagnation that is important to human development. Later, at his eighth stage, Erickson concluded that generativity plays the most critical role in the lives of older adults. He stated that ‘indeed, old people can and need to maintain a grand-generative function’ and that ‘vital involvement .. is necessary for staying really alive’ (Erikson, 1997, p.63). Based on Erikson’s work, McAdams and de St. Aubin (1992) developed a model to explain the generative process (Figure 8.1). In this model, generativity is defined as an adult’s concern for and commitment to promoting the development and well-being of future generations. Figure 8.1 demonstrates the seven features of generativity and the four interrelating concepts.



Source: McAdams and de St. Aubin (1992, p.1005).

However, because of the demographic shift in the population, the definitions of generativity by Erickson and others may change. Nowadays, OPs have a longer lifespan, and many of them live 10 to 20 years or more after their retirement. Some of them choose to continue working whilst many choose volunteer jobs or raise their grandchildren and great grandchildren (Cheng, 2009). Hence, the definition of generativity was extended to caring for those things that are created (Urrutia et al., 2009). Generativity now plays a significant role when associated with the well-being of older adults (James and Zarret, 2006). Many studies showed its positive association with other health outcomes such as quality of life (Østbye et al., 2018), disability and mortality (Gruenewald et al., 2012), and cognitive as well as psychological well-being (An and Cooney, 2006; Maselko et al., 2014; Rothrauff and Cooney, 2008; Tabuchi et al., 2015). The fulfilment of one's generative concern (represented by the values and self-perceptions of OPs) through generative actions (participation that contributes positively to the next generation) has contributed to higher levels of life satisfaction amongst OPs (Hofer et al., 2008).

Moreover, a deeper understanding of generativity in old age helps improve the quality of life of OPs. Therefore, the measure of generativity is necessary. Several measures had been proposed to assess generativity in old age (Schoklitsch and Baumann, 2011). Generally, the Loyola Generativity Scale (LGS) developed by McAdams and de St. Aubin (1992) is the most commonly used. The LGS is a measure of generative concern (Einolf, 2014).

There is no report about generativity in Vietnamese OPs thus far. The Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is, therefore, the first and a pioneer study on generativity of Vietnamese OPs. This study used the simplified version of the Loyola Generativity Scale, which includes six statements adopted from the short form of the original scale in the 1995 Midlife in the United States Survey to measure generative concern. In the LSAHV, respondents were asked to assess how often each of the following statements applies to them:

- 1) You have important skills you can pass along to others.
- 2) Many people come to you for advice.
- 3) You feel that other people need you.
- 4) You have had a good influence on the lives of other people.
- 5) You like to teach things to other people.
- 6) Others would say you have made unique contributions to society.

The responses were categorised as follows: 0 (never), 1 (occasionally/seldom), 2 (fairly often), and 3 (very often/nearly always). Then the percentage distribution and mean scores were calculated. Mean generativity score ranged from 0 to 18, with the higher score indicating a higher level of generativity. The analysis of generativity was done by age group and sex.

Figure 8.1 illustrates that concern (or attitude) and belief are two important features of generativity. In this study, the attitudes and beliefs of OPs on a range of issues, including support from children and co-residential living arrangement, were revealed. Understanding the values and preferences of OPs will help optimise the plans of physical, social, and mental intervention for this population sector. This understanding is particularly necessary in the context of the decline in traditional beliefs and attitudes driven by the influx of new ideas and social development factors such as industrialisation, urbanisation, globalisation, and socioeconomic development. Especially associated with the change in the traditional family structure in Asia, traditional multigenerational family systems, community, and values of filial piety have weakened with increasing urbanisation (Cheng, 2015; Löckenhoff et al., 2015). As a consequence, there are the disjunctions between what the ageing parent wants and what children perceive and are willing to provide (Cheng, 2015). For example, OPs expect female family members to assume household and caretaking responsibilities, which may conflict with the changing role of females, including their increasing involvement in their work.

Generativity

Table 8.1 shows the distribution of respondents according to their responses to the generativity statements by sex and age group. Overall, Vietnamese OPs registered a mean generativity score of 4.94 from a maximum score of 18. All scores for each question are smaller than 1. They scored themselves highest on being needed by other people ($M = 0.96$) and having important skills to pass along to others ($M = 0.95$). Both items also registered the highest proportion who answered either fairly or very often/nearly always (18.2% and 19.7%, respectively). The measures of generative concern with the next highest scores are having a good influence on the lives of others ($M = 0.9$), feeling that many people rely on them for advice ($M = 0.8$), and being keen on teaching or imparting knowledge to other people ($M = 0.75$). OPs scored themselves lowest on making unique contributions to the larger society ($M = 0.58$). One in four OPs think they do not have important skills that can be passed

along to others. More than half of them (51.6%) think that others would never say they have made valuable contributions to the larger society.

Table 8.1. Generativity by Sex and Age

Loyola Generativity Scale	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
How often do the following statements apply to older person:								
You have important skills you can pass along to others								
Never	21.0	28.3	n.s.	23.5	27.4	28.2	n.s.	25.1
Occasionally/Seldom	54.8	55.4		56.5	53.1	52.5		55.2
Fairly often	23.5	16.1		19.6	19.0	18.9		19.3
Very often/Nearly always	0.7	0.2		0.4	0.5	0.4		0.4
Mean score	1.04	0.77	***	0.96	0.75	0.73	n.s.	0.95
N	2,352	2,972		2,515	0.94	439		5,324
Many people come to you for advice								
Never	27.8	35.5	n.s.	30.5	33.8	36.2	n.s.	32.1
Occasionally/Seldom	59.4	55.5		58.9	54.9	53.6		57.2
Fairly often	12.6	8.9		10.4	10.9	10.1		10.5
Very often/Nearly always	0.3	0.1		0.2	0.4	0.1		0.2
Mean score	0.88	0.74	***	0.82	0.80	0.77	n.s.	0.80
N	1,355	2,974		2,516	1,826	987		5,329
You feel that other people need you								
Never	20.6	24.9	n.s.	21.1	25.0	28.3	n.s.	23.0
Occasionally/Seldom	59.0	58.6		59.6	57.2	55.9		58.8
Fairly often	19.3	15.5		18.1	15.9	15.1		17.2
Very often/Nearly always	1.0	1.0		1.1	0.9	0.8		1.0
Mean score	1.01	0.93	***	0.99	0.96	0.91	**	0.96
N	2,353	2,974		2,517	1,824	986		5,327
You have a good influence on the lives of other people								
Never	25.9	32.3	n.s.	28.0	31.1	33.3	n.s.	29.5
Occasionally/Seldom	53.2	52.2		53.0	52.2	52.0		52.7
Fairly often	20.1	14.8		18.1	16.3	14.3		17.2
Very often/Nearly always	0.8	0.7		0.9	0.4	0.4		0.7
Mean score	0.97	0.85	***	0.92	0.91	0.85	**	0.90
N	2,351	2,974		2,515	1,825	986		5,326
You like to teach things to other people								
Never	35.0	42.0	n.s.	37.9	40.7	39.7	n.s.	38.9
Occasionally/Seldom	48.2	43.9		45.7	45.5	47.3		45.8
Fairly often	15.0	13.7		15.2	13.1	12.3		14.3
Very often/Nearly always	1.8	0.4		1.2	0.6	0.7		1.0
Mean score	0.81	0.75	n.s.	0.75	0.75	0.73	n.s.	0.75
N	2,353	2,974		2,517	1,825	985		5,327

Loyola Generativity Scale	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Others would say you have made unique contributions to society								
Never	47.1	55.1	n.s.	50.5	52.9	54.1	n.s.	51.6
Occasionally/Seldom	41.9	37.4		40.3	37.7	38.5		39.4
Fairly often	10.2	7.0		8.4	9.1	7.2		8.4
Very often/Nearly always	0.7	0.4		0.7	0.4	0.2		0.6
Mean score	0.65	0.53	n.s.	0.58	0.59	0.55	n.s.	0.86
N	2,352	2,969		2,512	1,824	985		5,321
Mean Total	5.35	4.61	n.s.	5.01	4.94	4.75	n.s.	4.94
N	2,342	2,962		2,506	1,817	981		5,304

Sig = Statistical significance, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Gender differences in generative concern are observed amongst OPs. Males outscore their female counterparts in all six generativity items: they have essential skills that they think can be handed down to the next generation ($M = 1.04$); they feel that other people need them ($M = 1.01$); they perceive themselves to be a good influence on others ($M = 0.97$); they feel many people come to them for advice ($M = 0.88$); they like to teach things to other people ($M = 0.81$); and they feel they have contributed substantially to their community ($M = 0.65$). In contrast, females consistently expressed more negative self-assessment of generativity than males. For instance, 32.3% of females think that they do not have a good influence on the lives of other people, whilst only 25.9% of males have the same thought.

Generative concern differs across age groups. Relative to the older cohorts, the youngest cohort (60–69) scored the highest in their overall mean generativity scores for five items except the item ‘they feel they have made unique contributions to society’. In terms of distribution of responses, about one in five of those in their 60s said they have a good influence on the lives of other people, in contrast to 14.7% (fairly often/very often) amongst those in the oldest age group (80+). The same pattern emerged for the other four statements in that the proportion who expressed a negative self-assessment of generative concern increases with age.

Amongst the oldest age cohort (80+), about a quarter (33.3%) said they never have a good influence on the lives of other people; the comparative figures for those in their 60s and 70s are 28.0% and 31.1%, respectively. A considerable proportion of those in their 80s felt that many people would never come to them for advice (36.2%) and that they have never made unique contributions to society (54.1%).

Attitudes and Beliefs

The attitudes and perceptions of Vietnamese OPs were revealed through their responses to the list of questions in Table 8.2. Results indicated that most of them continue to maintain the traditional beliefs pertaining to family dynamics, gender roles, and age-appropriate behaviour. Almost all OPs think their children must support and take care of aged parents (98.4%) and the proportion increases with age. However, OPs are also aware of their responsibility to their children, with 75.7% of OPs thinking that parents have the duty to do their best for their children even at the expense of their own well-being. A large number of OPs (78.8%) support the idea that, upon their demise, their assets should go to the children who looked after them with no significant gender and age differences.

Table 8.2. Attitudes and Beliefs by Sex and Age

Attitudes and Beliefs	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who agree with the following statements:								
It is the child's duty to support and take care of older/aged parents.	98.2	98.5	n.s.	98.1	98.8	99.1	n.s.	98.4
It is acceptable for someone in their 60's or older to fall in love.	62.8	51.8	n.s.	59.7	54.0	47.6	n.s.	56.7
It is acceptable for someone in their 60's or older to (re)marry if they find a suitable partner.	58.7	48.4	n.s.	56.0	50.0	43.5	n.s.	52.9
It is acceptable for children who looked after their parents to inherit larger portions of their estate when they pass away	78.7	78.9	n.s.	80.3	76.1	76.7	n.s.	78.8
It is better for the elderly parent to live with a daughter than with a son.	42.5	49.3	n.s.	47.0	45.5	44.3	n.s.	46.3
Men should work for the family, and women should stay home and take care of the household.	59.1	59.0	n.s.	58.7	59.7	59.2	n.s.	59.0
It is the parents' duty to do their best for their children even at the expense of their own well-being.	74.1	76.9	n.s	75.6	75.3	76.8	n.s	75.7
N	2,349	2,963		2,507	1,819	986		5,312

Attitudes and Beliefs	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Best living arrangement for older person according to respondent								
Live by themselves	12.8	14.1		13.9	14.0	11.0		13.5
Live by themselves but near one or more children	27.3	22.5		25.8	23.6	21.3		24.7
Rotate residence among children	48.1	50.2		47.9	50.5	53.1		49.3
Live with a son	8.2	9.6	n.s.	8.5	9.3	10.6	n.s.	9.0
Live with a daughter	1.5	2.3		2.1	1.7	1.9		1.9
Others	0.7	0.2		0.4	0.4	0.3		0.4
Don't know	1.4	1.1		1.4	0.4	1.8		1.2
N	2,354	2,977		2,519	1,825	987		5,331

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Furthermore, it is common for Vietnamese OPs to believe in traditional gender roles. More than half of OPs (53.7%) thought it is better to live with their son than daughter, more amongst males than females (57.5% compared to 50.7%). The proportion of OPs who prefer living with their daughter over living with their son is highest amongst the youngest age cohort (60–69), and this proportion gradually declines with age. The belief in the traditional division of labour (i.e. men should work for the family whilst women should stay at home and take care of the household) changed recently. Based on the data in Table 8.2, slightly more than half of OPs (59.0%) believe that men should work for the family and women should stay at home and take care of the household. The proportion of OPs who think so stay mostly constant by sex and age group.

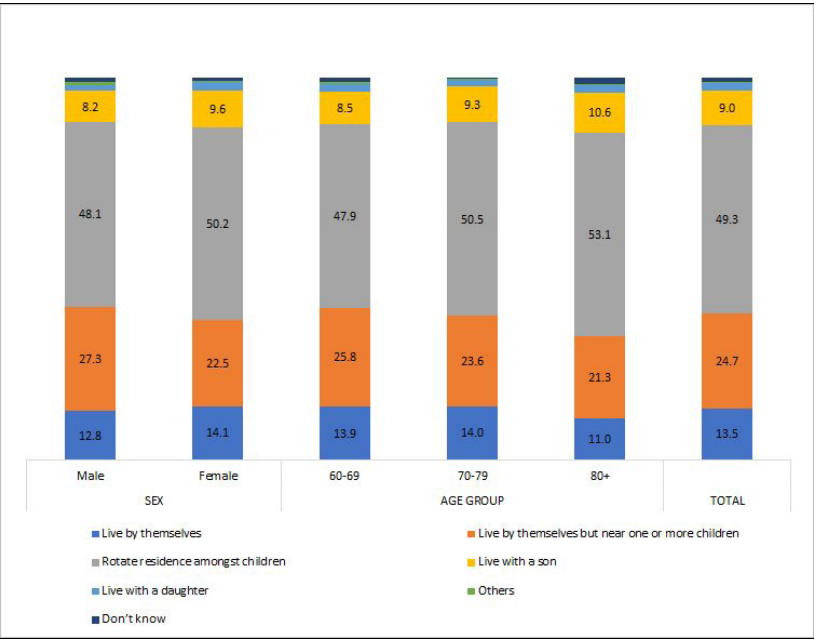
Additionally, the study explored the attitudes of OPs on romantic relationship and marriage in their 60s and older. Results show that Vietnamese OPs are more open to the idea of falling in love or (re)marrying after 60s; 56.7% think it is acceptable for someone in his/her 60s or older to fall in love, whilst 52.9% believe in (re)marrying if they find a suitable partner in their 60s and over. Males are more open than females in the belief of falling in love and getting married in their old age. For instance, 62.8% of male OPs agree that falling in love in old age is acceptable, whilst only 51.8% of females think the same. About two-thirds (58.7%) of male OPs believe that getting married in old age is a good idea whilst the proportion for females is lower (48.4%). As expected, the level of acceptance is higher amongst the younger, than the older, cohort. These findings reflect the effects of urbanisation and modernisation in Vietnamese's thoughts. The belief in traditional values is changing and may be expected to change more in the future.

Ideal Living Arrangement

As earlier discussed, OPs prefer to live with their son; however, they still think it is a good idea to rotate residence amongst children (49.3%). Furthermore, OPs perceive themselves as capable of looking after themselves. This is supported by the finding that 38.2% prefer to live alone or live by themselves but near to one or more children. This also served as an evidence of the improved health status amongst Vietnamese OPs. More females (14.1%) than males (12.8%) show their desire to live independently, whilst more males (27.3%) than females (22.5%) prefer to live alone but closer to their children (Figure 8.2).

Figure 8.2 shows that the patterns of ratio of attitude and belief of OPs in living arrangement are similar by sex and age group. About half of OPs prefer to live amongst their children in rotation and about a quarter prefer to live independently. More OPs desire to live with a son than a daughter (9% compared to 1.9%). This number again confirms the male preference in Viet Nam’s culture.

Figure 8.2. Best Living Arrangement of Older Persons by Sex and Age (%)



Source: Calculated by PHAD using original LSAHV data.

Summary, Conclusions, and Recommendations

This chapter explored the issue of generativity in old age of Vietnamese OPs. Older Vietnamese are most predisposed to feel needed by others and have important skills to pass along to younger generations. The LSAHV revealed that OPs in their 60s have a higher level of generativity relative to their older counterparts. Men viewed themselves better on feeling recognised for their valuable contributions to society than women. Regardless of sex and age, OPs have the poorest self-assessment of their unique contributions to society.

It is a challenge to assess the country's older overall generativity given the absence of a precedent study in Viet Nam. The LSAHV served as the first study to explore and overview generative concern amongst Vietnamese OPs. Future studies could explore the factors that explain the observed variability in the generativity of OPs. To what extent are these outcomes explained by their lower education compared to the younger generation to whom they are expected to pass on their skills and knowledge? What is the role of the OPs' dependence on their children in financial, material, and instrumental support to explain the lower generativity in advanced age? What is the effect of changing roles and values over time? These are important areas to consider, as some have argued that the perception of respect and acceptance from the younger generation is imperative to the OPs' generative action (Tabuchi et al., 2015). Many of these questions can be addressed with follow-up data from a panel survey.

The LSAHV also provided OPs' views and expectations on their beliefs and attitudes. In the context of their rapidly changing environment, the traditional beliefs and attitudes on filial responsibilities, gender expectations, and age-appropriate behaviours are gradually changing. Results showed strong support for an intergenerational contract (Croll, 2006) between parents and their children under which children are obliged to take responsibility for their ageing parents in exchange for their parents' sacrifices for them. Results of the 2018 LSAHV also reflected this gendered pattern of filial expectation.

When asked if they would be better off living with a son or a daughter, a higher proportion of OPs are keen to live with their sons rather than their daughters, whilst some of them still prefer to live with all children on rotation. Recently, more Vietnamese OPs prefer to live independently and believe that household responsibilities are given to both women and men.

References

- An, J.S.A. and T.M. Cooney (2006), 'Psychological Well-being in Mid to Late Life: The Role of Generativity Development and Parent-Child Relationships across the Life Span', *International Journal of Behavioral Development*, 30(5), pp.410-21.
- Cheng, S.T. (2009), 'Generativity in Later Life: Perceived Respect from Younger Generations as a Determinant of Goal Disengagement and Psychological Well-being', *Journal of Gerontology: Psychological Sciences*, 64B(1), pp.45-54.
- Cheng, S.T. (2015), 'Demographic and Family Trends in Asia', in S.T. Cheng, I. Chi, H.H. Fung, L.W. Li, and J. Woo (eds.), *Successful Aging: Asian Perspectives*. Dordrecht, The Netherlands: Springer. pp.21-32.
- Croll, E.J. (2006), 'The Intergenerational Contract in the Changing Asian Family', *Oxford Development Studies*, 34(4), pp.473-91.
- Einolf, C.J. (2014), 'Stability and Change in Generative Concern: Evidence from a Longitudinal Survey', *Journal of Research in Personality*, 51, pp.54-61.
- Erikson, E.H. (1950), *Childhood and Society*. New York, NY: W.W. Norton & Co.
- Erikson, E.H. (1977), *Childhood and Society*. London: Paladin Grafton Books.
- Erikson, E.H. (1997), *The Life Cycle Completed: Extended Version with New Chapters on the Ninth Stage of Development*. New York, NY: W.W. Norton & Co.
- Garcia, P.R.J.M., P. Bordia, S.L.D. Restubog, and V. Caines (2017), 'Sleeping with a Broken Promise: The Moderating Role of Generativity Concerns in the Relationship between Psychological Contract Breach and Insomnia among Older Workers', *Journal of Organizational Behavior*, 39, pp.326-38.
- Gruenewald, T.L., D.H. Liao, and T.E. Seeman (2012), 'Contributing to Others, Contributing to Oneself: Perceptions of Generativity and Health in Later Life', *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 67(6), pp.660-65.
- Hofer, J., H. Busch, A. Chasiotis, J. Kartner, and D. Campos (2008), 'Concern for Generativity and its Relation to Implicit Pro-social Power Motivation, Generative Goals, and Satisfaction with Life: A Cross-cultural Investigation', *Journal of Personality*, 76(1), pp.1-30.
- James, J.B. and N. Zarret (2006), 'Ego Integrity in the Lives of Older Women', *Journal of Adult Development*, 13, pp.61-75.

- Löckenhoff, C.E., D.S. Lee, K.M.L. Buckner, R.O. Moreira, S.J. Martinez, and M.Q. Sun (2015), 'Cross-cultural Differences in Attitudes about Aging: Moving beyond the East–West Dichotomy', in S.T. Cheng, I. Chi, H.H. Fung, L.W. Li, and J. Woo (eds.), *Successful Aging: Concepts, Reflections, and its Relevance to Asia*. Dordrecht, The Netherlands: Springer. pp.321–38.
- Maselko, J., M. Sebranek, M. Mun, B. Perera, J. Ahs, and T. Østbye (2014), 'Contribution of Generative Leisure Activities to Cognitive Function in Elderly Sri Lankan Adults', *Journal of the American Geriatric Society*, 62(1), pp.1707–13.
- McAdams, D.P. and E. de St. Aubin (1992), 'A Theory of Generativity and its Assessment through Self-report, Behavioral Acts, and Narrative Themes in Autobiography', *Journal of Personality and Social Psychology*, 62(6), pp.1003–15.
- Østbye, T. et al. (2018), 'Generativity among Elderly in a Rural Area of Maharashtra, India: Correlates and Relationship with Quality of Life Approved', *Asia-Pacific Journal of Public Health*, 30(3), pp.276–85.
- Rothrauff, T. and T.M. Cooney (2008), 'The Role of Generativity in Psychological Well-being: Does It Differ for Childless Adults and Parents?', *Journal of Adult Development*, 15, pp.148–59.
- Schoklitsch, A. and U. Baumann (2011), 'Generativity and Aging: A Promising Future Research Topic?', *Journal of Aging Studies*, 26, pp.262–72.
- Tabuchi, M., T. Nakagawa, A. Miura, and Y. Gondo (2015), 'Generativity and Interaction between the Old and Young: The Role of Perceived Respect and Perceived Rejection', *The Gerontologist*, 55(4), pp.537–47.
- Urrutia, A., M.A. Cornachione, G. Moisset de Espanés, L. Ferragut, and E. Guzmán (2009), 'The Culminating Point of Generativity in Older Women: Main Aspects of Their Life Narrative', *Forum Qualitative Sozialforschung*, 10(3).

Activities, Social Isolation, and Information Technology

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

Many studies reported the critical role of social support networks within the broader framework of successful ageing (Golden et al., 2009; Lubben and Gironde, 2003). It is suggested that social support networks foster amongst older persons (OPs) more active participation in social events and exchanges with various members of their community. On the other hand, social isolation resulting from inadequate social support leads to loneliness, depression, and vulnerability, and subsequently to other adverse health problems. For example, in a longitudinal sample of 1,149 older adults in the North Carolina Established Populations for Epidemiologic Studies of the Elderly, functional disability was strongly associated with increased depressive symptoms over a period of 6 years, even after adjusting for the baseline experience of negative life events, chronic conditions, and sociodemographic characteristics. Although assistance from family and friends was not a significant mediator, subjective support was still a significant buffer against the adverse impacts of disability on depressive symptoms (Yang, 2006).

Nowadays, a larger number of OPs live in relative degrees of social isolation (Baecker et al., 2014). There are lonely OPs at home or, when hospitalised, in rehabilitation facilities for a long time. They may suffer from chronic pain and may have physical or cognitive difficulties in mobility or communication. During those conditions, the use of technology and providing information will assist OPs in facing the difficulties of modern life more easily, trespassing the limits of their social and emotional isolation, thus achieving a more qualitative living (Keranen et al., 2017).

To have a deeper understanding of the life of OPs', this chapter explores their daily activities and the relationship between religiosity and their ageing. This chapter also provides information on the social isolation of Vietnamese OPs within the evolving digital technologies of the period.

Activities of Older Persons

After retirement, many OPs choose to continue working; some of them enjoy attending physical activities and others choose to participate in charity jobs. How do OPs spend their time after retirement is normally related to their social roles and health status; it also gives a glimpse of their quality of life. Retired OPs usually have less economic burden as they have shifted their responsibilities as the main economic provider in the family to their children. Thus, they have greater liberty to choose activities they are interested in pursuing given their physiological condition.

Activities of Older Persons

The LSAHV provided a list of activities, and respondents were asked how often they participate in those activities. Daily activities are classified as sedentary, physical, and social. Sedentary activities include listening to the radio, reading, and watching TV, whilst physical activities include physical exercises and gardening. The rest of the activities in the list are social activities such as hanging out with friends and neighbours, the primary intent of which is socialisation.

Table 9.1 shows that the most common activity OPs often participate in is watching TV (79.5%), with more males (85.4%) preferring to watch TV than females (75.1%). The percentages of OPs engaged in listening to radio, gardening, and hanging out with friends and neighbours are similar (32.4%, 35.0%, and 31.1%, respectively). About one in four OPs said they enjoy physical exercises. Physical exercises include walking, jogging, dancing, aerobics, and Zumba. A low proportion of OPs (13.6%) read newspapers, magazines, or books. This may be explained by the switch from paper to digital media for information amongst OPs.

Table 9.1. Activities by Sex and Age

Activities	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% of older person who do the following activities daily:								
Listens to radio	37.8	28.4	n.s.	34.0	32.6	26.7	n.s.	32.4
Reads newspapers, magazines or books	21.5	7.7	**	16.2	12.8	5.9	*	13.6
Watches TV	85.4	75.1	*	86.0	78.0	59.1	**	79.5
Do physical exercises	29.2	23.1	n.s.	29.6	24.6	14.1	*	25.7
Gardening	37.0	33.5	n.s.	41.0	33.7	16.0	n.s.	35.0
Hangout with friends and neighbors	32.5	30.1	n.s.	34.8	29.8	20.2	**	31.1
% of older person who do the following activities at least once a month:								
Watches movies outside the house	0.7	0.5	n.s.	0.6	0.7	0.5	n.s.	0.6
Attend social activities	11.7	8.4	n.s.	11.8	8.0	5.8	n.s.	9.8
Gambling for leisure	3.7	1.0	*	2.4	2.2	1.4	n.s.	2.2
N	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, n.s = not significant.

Source: Calculated by PHAD using original LSAHV data.

The activities that OPs often participate in differ by sex, depending on the categories of activities. In general, male OPs more actively participate in daily activities than female OPs. Especially, there is a significant gender difference in reading newspapers, magazines, or books (21.5% for males compared to 7.7% for females). As age increases, the proportion of OPs' participation in all daily activities decline. This is likely due to the age-related decline in OPs' physical condition. For example, the percentage of gardening is reduced from 41% at age 60–69 to 16% at age 80+.

Furthermore, respondents were asked if they participate in other activities such as watching movies outside the house, attending social activities, and gambling for leisure at least once a month. Not surprisingly, an extremely low percentage of OPs choose to watch movies outside the house (0.6%) and gamble for leisure (2.2%). The reasons might be the OPs' saving habit or their decline in mobility. Although social activities attracted the highest proportion of OPs, only 1 in 10 attends social activities at least once a month. Also, more male than female OPs engage in all activities. OPs' attendance in all activities declines with age.

Religiosity and Ageing

Evidence proved the affiliations between religiosity and happiness (Tuyen et al., 2015). Especially, when people get older, religiosity tends to be more linked with

happiness (Brown and Tierney, 2009). Furthermore, religion and health are the two most important positive determinants of subjective well-being of OPs (Okun and Stock, 1987). Therefore, in this study, we explored the religious activities of OPs by sex and age. When asked about their religious activities, generally, Vietnamese OPs did not express high interest in participating in religious activities (Table 9.2). About one-third (34.9%) reported attending religious services at home with other family members. Less than 20% said they pray alone or privately in places other than a public place. Moreover, only 12.6% attend religious activities outside the home, and 11.3% choose to watch or listen to religious activities through TV or radio. The least common religious activity that OPs choose is reading the Bible or any religious materials (8.3%). More female than male OPs participate in the listed religious activities except to watch or listen to religious activities through TV or radio. Those aged 70–79 are more involved in religious activities than their older counterparts except performing religious activities at home with other family members. This phenomenon might be explained by the fact that those aged 70–79 have more free time and are in good health to participate in religious activities.

Table 9.2. Religious Activities by Sex and Age

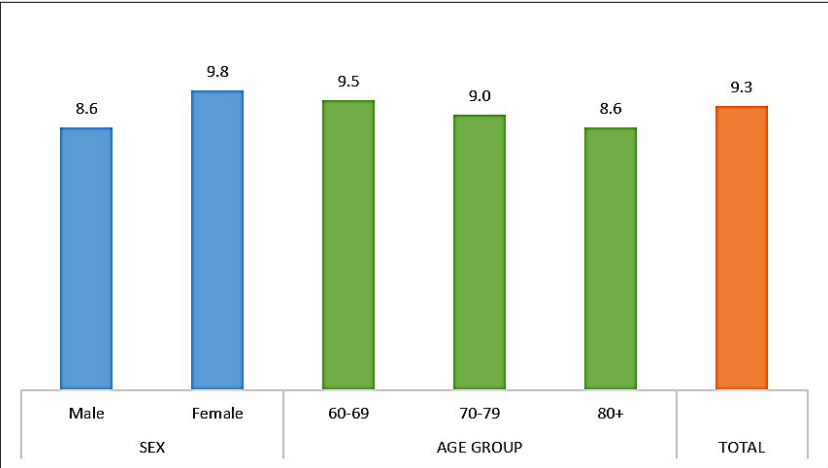
Religious Activities	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who performs the following activities:								
Attends religious services outside the home	6.1	8.4	n.s.	7.3	8.8	6.1	n.s.	7.5
Attends religious activities outside the home (prayer meeting, bible studies, etc.)	9.3	15.1	n.s.	13.3	14.2	8.0	*	12.6
Prays alone or privately in places other than a public place of worship	11.9	20.2	n.s.	17.4	18.2	11.6	n.s.	16.6
Performs religious activities at home with other family members	32.3	36.8	n.s.	36.0	35.4	30.0	n.s.	34.9
Watches or listens to religious activities through TV or radio	12.5	10.4	n.s.	11.3	12.7	9.2	n.s.	11.3
Reads the Bible or any religious materials	5.5	10.4	n.s.	8.3	8.9	7.1	n.s.	8.3
N	2,570	3,480		2,638	2,004	1,408		6,050
% who are currently members of any religious group or organisation	2.3	3.8	n.s.	3.0	4.2	2.2	n.s.	3.2
N	2,564	3,461		2,624	2,000	1,401		6,025
% who said religion is very important in their life	8.6	9.8	n.s.	9.5	9.0	8.6	n.s.	9.3
N	2,355	2,974		2,516	1,826	987		5,329

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Less than 10% of OPs consider religion very important in their lives (Figure 9.1) and only 3.2% are currently members of religious groups or organisations (Table 9.2). Females and those aged 70–79 are more likely to be a member of religious organisations than their respective counterparts. More females than males indicated the importance of religion in their lives (Figure 9.1).

Figure 9.1. Percentage of Vietnamese Older Persons Who Said Religion Is Very Important in their Lives by Sex and Age



Source: Calculated by PHAD using original LSAHV data.

Membership in Organisations and Volunteerism

Other social activities of OPs are with non-religious organisations. About 25% are members of any type of non-religious organisation (Table 9.3). More male OPs (26.1%) are interested in becoming members of non-religious organisations than female OPs (21.8%). Those aged 80 and above have the least proportion of membership in non-religious organisations (18.2%) whilst those aged 60–69 and 70–79 have a similar proportion (about 25%) of membership in non-religious organisations.

Within the non-religious organisations, organisations of retired OPs and veterans attracted the largest number of membership (85.6% of OPs). It is followed by community centres or social or recreational clubs (6.0%) and clan associations (3.6%). Oppositely, few OPs are members of political groups (1.2%) and business

professional or farm associations (1.6%). There is no clear pattern between male and female OPs in the type of non-religious organisations. More males than females are members of retired and veteran organisations, whilst more females than males are members of community centres or social or recreational clubs and clan associations. Significantly, more OPs aged 60–69 are members of community centres or social or recreational clubs (7.5%) than those aged 80+ (0.6%). None aged 80+ is a member of a business professional or farm association. In contrast, 94.2% of those aged 80+ are members of organisations of retired OPs. Overall, 9.8% of OPs are engaged in volunteer work in church or community, where females (12.2%) are more likely to engage in volunteer work than males (7.2%).

Table 9.3. Membership in Organisations by Sex and Age

Membership in Organisations	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60–69	70–79	80+	Sig	
% who are members of any type of non religious organisations	26.1	21.8	n.s.	24.8	24.5	18.2	n.s.	23.6
N	2,563	3,465		2,626	1,998	1,404		6,028
Types of organisations								
Business professional or farm associations	1.8	1.4		2.3	0.6	0		1.6
Political groups	1.3	1.0		1.2	1.2	0.9		1.2
Community centers or social or recreational clubs	4.7	7.3	n.s.	7.5	5.3	0.6	n.s.	6.0
Clan associations	3.3	3.9		3.0	5.7	2.2		3.6
Organisations of retired older persons	89.4	82.2		83.4	86.6	94.2		85.6
% who are engaged in any volunteer work in church or community	7.2	12.2		9.4	13.9	3.9		9.8
N	602	694		598	451	247		1,296

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Social Isolation

Decreasing economic resources, mobility impairment, and deaths of contemporaries increase the risk of social isolation and loneliness amongst OPs. Social isolation is an ‘objective and quantifiable reflection of reduced social network size and paucity of social contacts’ (Stephoe et al., 2013, p. 5797). Social isolation has two forms: social disconnectedness and perceived isolation (Cornwell and Waite, 2009).

Disconnectedness is due to the lack of contact with their social network, disinterest in social activities, and lack of participation in their social groups. Perceived isolation is associated with the sense of loneliness due to the feeling of an absence of support and companionship based on personal experience. Such feeling of loneliness may occur when there is a difference between the perceived and expected amount of support that the OPs receive from their families, especially their children.

Loneliness

The LSAHV used the three-item loneliness scale of the University of California, Los Angeles to explore the loneliness of Vietnamese OPs (Chan et al., 2015; Hughes et al., 2004). The items include how often one feels a lack of companionship, how often one feels left out, and how often one feels isolated from others. The OPs themselves, not proxy respondents, were directly asked these questions.

The LSAHV data revealed that the majority of OPs (74.8%) rarely or never feel a lack of companionship (Table 9.4). However, about 2 in 10 expressed that they occasionally feel a lack of companionship. Only a small percentage think that they always or fairly often feel they do not have companionship (3.9%). Significantly, more male than female OPs never feel a lack of companionship (45.7% compared to 34.8%). The same proportion of male and female OPs rarely feel a lack of companionship. Otherwise, more females always, often, and occasionally feel a lack of companionship than male OPs. The feeling of a lack of companionship increases with age.

Furthermore, the percentage of OPs who never or rarely feel left out or isolated from others is higher (86.0% and 87.7%, respectively) than other categories. The proportion of those who always or often feel left out or isolated from others is extremely small (1.5% and 1.6%, respectively). The number of OPs who feel left out or isolated from others has a similar pattern, by age and sex, to those who feel a lack of companionship.

Overall, loneliness amongst Vietnamese OPs is low. All three indicators of loneliness suggested that more females than males experience loneliness, and this emotion increases with age.

Table 9.4. Loneliness of Older Persons by Sex and Age

Loneliness	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Feels lack of companionship								
Always	0.7	0.8		0.7	0.5	1.4		0.7
Fairly often	2.3	3.9		2.7	3.5	5.0		3.2
Occasionally	16.1	25.3	*	18.8	24.8	26.0	n.s.	21.2
Rarely	35.3	35.2		36.1	32.2	36.7		35.2
Never	45.7	34.8		41.7	39.0	31.0		39.6
Feels left out								
Always	0.3	0.2		0.2	0.1	0.5		0.2
Fairly often	1.6	1.1		1.1	1.3	2.5		1.3
Occasionally	10.2	14.4	n.s.	9.9	15.5	19.6	n.s.	12.5
Rarely	29.7	32.1		30.8	30.5	33.2		31.1
Never	58.3	52.1		58.0	52.6	44.2		54.9
Feels isolated from others								
Always	0.1	0.2		0.1	0.0	0.4		0.1
Fairly often	1.3	1.6		1.2	2.1	1.6		1.5
Occasionally	9.7	11.3	n.s.	8.7	13.2	14.4	n.s.	10.6
Rarely	32.5	36.9		34.9	32.4	39.8		34.9
Never	56.4	50.4		55.1	52.2	43.7		52.8
N	2,353	2,971		2,514	1,825	985		5,324

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Social Isolation from Relatives Not Living with the Older Persons

The Lubben social network scale was revised and used to assess social isolation (Lubben and Gironde, 2003). The revised scale consists of three items on relatives (e.g. children, grandchildren, in-laws, siblings, nieces, nephews, cousins, uncles, and aunts) not living with the respondents. Respondents were asked whether they see or hear from these relatives at least once a month, whether they feel at ease with these relatives to talk about private matters, and whether they feel close to these relatives such that they could call on them for help. Again, OPs themselves, and not proxy respondents, were directly asked these questions.

When asked about their relationships with relatives not living with them, a small proportion of OPs expressed feelings that may be related to social isolation. Only 12.3% reported not seeing or hearing from any relatives for at least once a month, 15.5% said they do not feel at ease talking about private matters with any relatives, and 14.7% said they do not feel close enough to any relatives to call on them for help (Table 9.5).

Table 9.5. Social Isolation from Relatives Not Coresiding with Older Person by Sex and Age

Social Isolation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who do not have any relatives to see or hear from at least once a month	11.7	12.9	n.s.	12.9	11.9	10.5	n.s.	12.3
% who do not have any relatives whom they feel at ease with that the older person can talk about private matters	13.9	16.8	n.s.	16.0	14.7	14.7	n.s.	15.5
% who do not have any relatives whom they feel close to such that the older person could call on them for help	14.1	15.2	n.s.	14.8	14.9	13.8	n.s.	14.7
<i>N</i>	2,353	2,970		2,512	1,825	986		5,323
% who never see or hear from relatives with whom older person have the most contact	5.8	5.8	n.s.	5.2	6.2	7.6	n.s.	5.8
% who never get consulted when one of the relatives has an important decision to make	7.0	8.6	n.s.	7.4	7.5	10.7	n.s.	7.9
% who never get to talk with any of the relatives when older person have an important decision to make	6.6	7.3	n.s.	6.2	7.8	9.5	n.s.	7.0
<i>N</i>	2,350	2,971		2,512	1,825	984		5,321
Satisfaction with the level of contact with relatives								
Very satisfied	17.4	12.2		15.6	12.6	13.1		14.5
Satisfied	76.1	78.8		78.2	77.1	75.8		77.6
Unsatisfied	4.5	6.7	n.s.	4.4	7.8	8.0	n.s.	5.7
Very unsatisfied	0.5	0.5		0.6	0.3	0.4		0.5
Not sure	1.5	1.9		1.3	2.2	2.7		1.7
<i>N</i>	2,352	2,972		2,515	1,825	984		5,324

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

The proportion who reported not having contact with any relatives at least once a month decreases with age. In addition, more females than males do not feel at ease talking about private matters with any relatives, do not feel close enough to any relatives to call on them for help, and do not see and hear from any relatives at least once a month. The proportions for the three questions also slightly differ with age.

OPs were also asked about the frequency of contact for various reasons with relatives not living with them. Only 5.8% never saw or heard from relatives whom OPs have the most contact, suggesting that nearly all OP respondents have relatively active contact with their relatives. The percentage of males and females who reported having little contact with their relatives is the same (5.8%). The proportion of those who never see or hear from relatives with whom OPs have the most contact increases with age.

About 8% of OPs feel they never get consulted when one of their relatives has an important decision to make. Similarly, 7% said they never get to talk with any of their relatives when the OPs have an important decision to make. More female than male OPs said they never get consulted when a relative has an important decision to make, and they never get a chance to talk with relatives when the OPs have an important decision to make. Differentials also increased with age. Compared with their counterparts, those aged 80 and above feel left out when their relatives make major decisions.

OPs were also asked to rate their level of satisfaction with their contact with relatives. The majority (92.1%) are either very satisfied or satisfied. More males (93.5%) than females (91.0%) are satisfied with their level of contact with relatives. Few are unsatisfied (5.7%) or very unsatisfied (0.5%) with the level of contact with relatives. More female OPs are unsatisfied with the level of contact with relatives than male OPs; this proportion increases with age.

Social Isolation from Friends

The OPs themselves were directly asked the same questions on social isolation in relation to their friends, including those who live in their neighbourhood. These questions were not asked of proxy respondents.

About 11% reported not seeing or hearing from any friends for at least once a month (Table 9.6). The proportion who reported this was higher for females and those aged 80 and over. About 17% of OPs do not feel at ease with talking about private matters with any friends. The proportion of those who feel this way is higher amongst females than males, and amongst those aged 80+ compared to younger groups. About 17% of OPs do not feel close enough to any friends to call on them for help. More males than females express this feeling, and the proportion of OPs who feel this way increases with age.

Table 9.6. Social Isolation from Friends by Sex and Age

Social Isolation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who do not have any friends to see or hear from at least once a month	10.4	11.6	n.s.	11.0	10.8	12.0	n.s.	11.1
% who do not have any friends whom they feel at ease with that the older person can talk about private matters	16.3	18.2	n.s.	17.3	16.4	19.6	n.s.	17.4
% who do not have any friends whom they feel close to such that the older person could call on them for help	17.5	15.9	n.s.	16.6	15.3	19.2	n.s.	16.6
<i>N</i>	2,352	2,969		2,512	1,826	983		5,321
% who never see or hear from friends with whom older person have the most contact	7.9	9.8	n.s.	7.9	9.8	12.7	n.s.	9.0
% who never get consulted when one of the friends has an important decision to make	11.2	15.3	n.s.	11.9	15.5	17.5	n.s.	13.5
% who never get to talk with any of the friends when older person have an important decision to make	11.3	14.9	n.s.	11.7	15.2	17.0	n.s.	13.3
<i>N</i>	2,352	2,973		2,514	1,826	986		5,326
Satisfaction with the level of contact with friends								
Very satisfied	10.9	7.0		8.9	7.9	9.1		8.7
Satisfied	81.1	83.3		83.8	81.1	77.5		82.3
Unsatisfied	5.4	6.4	n.s.	4.5	8.1	9.0	n.s.	6.0
Very unsatisfied	1.2	0.6		0.9	0.6	1.0		0.8
Not sure	1.4	2.9		1.9	2.3	3.5		2.2
<i>N</i>	2,351	2,971		2,514	1,824	984		5,322

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

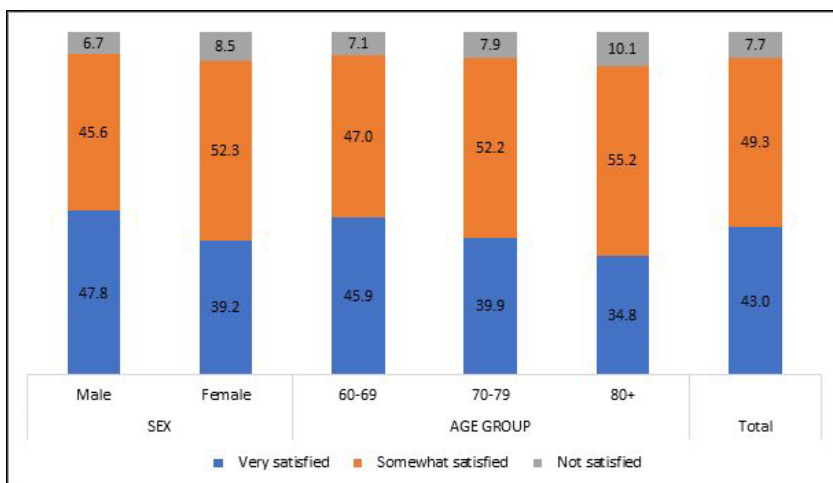
About 9% of OPs never see or hear from friends with whom they have the most contact; 13.5% feel they never get consulted when one of their friends has an important decision to make. Females and those aged 80+ registered the largest proportions in both instances. About 13% of OPs never get to talk with any of their friends when they have an essential decision to make. The proportion of those who feel this way is higher amongst females and those aged 80+.

The majority (91%) of OPs are satisfied or very satisfied with their overall level of contact with friends. Only 6.8% are either unsatisfied or very unsatisfied, with a slightly higher proportion amongst females than males (7.0% compared to 6.6%, respectively). The proportion of those unsatisfied or very unsatisfied with the level of contact with friends is the highest for those aged 80 or above. About 2% are not sure of how they feel regarding their level of contact with friends.

Life Satisfaction

In the LSAHV, we asked OPs whether they are satisfied with their current life. The possible responses were ‘Yes, very satisfied’, ‘Yes, satisfied’, and ‘No, not satisfied.’ Figure 9.2 shows that the majority (about 92%) of OPs are satisfied and very satisfied with their lives. More male OPs than female OPs are very satisfied with their lives. Only 7.7% are unsatisfied, with a slightly higher proportion amongst females than males (8.5% compared to 6.7%). The proportion of those satisfied decreases with age, but the differences are not significant.

Figure 9.2. Current Life Satisfaction by Sex and Age (%)



Source: Calculated by PHAD using original LSAHV data.

In addition to life satisfaction, the LSAHV also investigated the extent to which OPs feel they can share worries or problems with their family, relatives, or friends. The results indicate that more than 90% OPs have family, relatives, or friends who are willing to listen to them a great deal, quite bit, or some (Table 9.7), whereas a small number of OPs reported that their relatives or friends have very little or no willingness at all to listen to them. A very small proportion (0.7%) of OPs do not share their worries or problems with others. There are no significant differences between sexes and age groups but more of those in the oldest age group feel that their family, relatives, or friends have little or no willingness to listen to them.

Table 9.7. Life Satisfaction by Sex and Age

Life Satisfaction	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Current life satisfaction								
Very satisfied	47.8	39.2		45.9	39.9	34.8		43.0
Somewhat satisfied	45.6	52.3	n.s.	47.0	52.2	55.2	n.s	49.3
Not satisfied	6.7	8.5		7.1	7.9	10.1		7.7
N	2,294	2,905		2,468	1,778	953		5,199
% who feel that their family, relatives,or friends are willing to listen when they need to talk about their worries or problems								
A great deal	12.6	11.2		13.1	10.0	9.0		11.8
Quite bit	49.3	45.7		50.2	43.2	40.7		47.3
Some	30.0	34.7	n.s.	29.5	38.3	37.1	n.s.	32.6
Very little	6.3	6.2		5.3	6.9	9.6		6.2
Not at all	1.2	1.6		1.6	0.9	2.0		1.5
Keep to myself	0.6	0.7		0.4	0.7	1.7		0.7
N	2,267	2,816		2,433	1,730	920		5,083

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Use of Information Technology

To overcome loneliness and social isolation, older adults are encouraged to be more informed through the Internet, thematic television channels, magazines, and other modes of information technology (IT). These may involve the use of the simplest daily electrical appliances such as television, kitchen, vacuum cleaner, and dishwasher or more complex machines such as automated teller machines, personal computers, and mobile phones.

Advances in IT have led to the wide use of electronic communication, and development of varied digital tools for communication and information although the rapid changes in IT development have been a challenge for OPs to keep up. Studies show that communication with relatives and friends through the Internet reduces the isolation levels of senior digital migrants who grew up before the widespread use of digital technology (Pullum and Akyil, 2017).

The LSAHV data revealed that about 12.7% of OPs have access to the Internet (Table 9.8). They usually spend an average of 2.3 hours daily on the Internet. Males have significantly more access to the Internet than females (17.5% vs 9%), and also spend more time on the Internet than females (2.44 hours vs 2.19 hours). The proportion of OPs accessing the Internet decreases with age (17.0% for the 60–69 group, 8.8% for the 70–79 group, and only 2.8% for the 80+ group). The proportion of OPs who have a social networking account is 34.7%, which is commonly Facebook (30.9%) and Zalo (20.1%).

More than half of OPs (58.4%) have a cell phone. The proportion is higher amongst males than females (66.7% vs 52.2%). Subsequently, daily use of cell phones is also higher for males than females (1.65 hours vs 1.41 hours). The number of OPs who own a cell phone and the number of hours of cell phone use per day decrease with age.

Overall, tablets are not common amongst Vietnamese OPs (1.5%). More males than females own tablets (2.1% vs 1.1%), and tablet ownership decreases with age. Those aged 60–69 spend the most time, an average of 2.24 hours per day on a tablet compared to their counterparts. Additionally, only 2.3% own a laptop, with an average of 2.22 hours of use per day. More males than females own laptops (4.1% compared to 0.9%, respectively), and the proportion of laptop ownership is the highest amongst the youngest cohort (60–69 years).

The top four mentioned uses of IT gadgets are for calling friends and family (90.3%), watching movies and TV shows, and listening to music (25.8%); reading e-books, magazines, and online news (10%); and making voice or video calls (8.3%). Few OPs use IT gadgets for sending emails (2.1%), messaging (2.3%), and playing video or computer games (2.2%). Internet banking is the most uncommon mentioned use of IT gadgets (0.7%). More males than females use IT gadgets for all the mentioned uses of gadgets except for watching movies and TV shows. The proportion of those

who use IT gadgets to call friends and family decreases with age, but the proportion remains high for all age groups (the lowest proportion is 85.7% for the 80+ group).

Table 9.8. Use of Information Technology by Sex and Age

Information Technology	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who have access to internet	17.5	9.0	*	17.0	8.8	2.8	**	12.7
<i>N</i>	2,340	3,050		2,386	1,795	1,209		5,390
Mean number of hours of internet access per day	2.44	2.19	n.s.	2.33	2.4	2.1	n.s.	2.34
<i>N</i>	378	266		447	165	32		644
% with social networking account	33.4	36.7	n.s.	37.4	25.0	21.7	n.s.	34.7
<i>N</i>	428	317		491	203	51		745
Type of social networking account								
Facebook	29.1	33.6		33.4	21.1	21.6		30.9
Instagram	1.1	1.7		1.5	0.9	0.0		1.3
Youtube	8.2	4.8	n.s.	8.0	3.1	0.0	n.s.	6.9
Twitter	0.2	1.2		0.6	0.9	0.0		0.6
Zalo	18.4	22.8		21.6	15.7	9.1		20.1
Others (messenger, skype, viber, etc.)	0.2	0.6		0.2	0.9	0.0		0.3
<i>N</i>	431	321		495	205	52		752
% who owns a cellphone	66.7	52.2	**	72.2	50.0	23.1	***	58.4
<i>N</i>	2,565	3,465		2,623	2,002	1,405		6,030
Mean number of hours of cellphone use per day	1.65	1.41	***	1.66	1.34	1.37	***	1.53
<i>N</i>	1,156	1,114		1,332	719	219		2,270
% who owns a tablet	2.1	1.1	n.s.	2.2	0.8	0.3	n.s.	1.5
<i>N</i>	2,555	3,461		2,612	2,000	1,404		6,016
Mean number of hours of tablet use per day	1.89	2.47	n.s.	2.24	2.16	1.6	n.s.	2.17
<i>N</i>	40	37		53	19	5		77
% who owns a laptop	4.1	0.9	*	3.3	1.2	0.3	n.s.	2.3
<i>N</i>	2,563	3,462		2,619	2,000	1,406		6,025
Mean number of hours of laptop use per day	2.29	2.31	n.s.	2.30	1.74	2.86	n.s.	2.22
<i>N</i>	81	27		79	22	7		108
Use of gadgets								
Calling friends and family	90.1	89.9	n.s.	91.1	88.8	85.7	n.s.	90.3
Sending or receiving emails	3.0	1.2	n.s.	2.5	1.2	0.2	n.s.	2.1
Chat site messaging	2.9	1.8	n.s.	2.9	0.8	0.7	n.s.	2.3
Voice or video call using the internet	9.4	7.2	n.s.	9.3	6.3	3.7	n.s.	8.3
Playing video or computer games	2.0	2.3	n.s.	2.7	0.9	0.3	n.s.	2.2
Watching movies and TV shows, and listening to music	25.5	26.0	n.s.	28.4	19.7	16.4	n.s.	25.8
Read ebooks, magazines and online news	13.8	6.4	*	11.7	6.5	3.7	n.s.	10.0
Internet banking	0.9	0.4	n.s.	0.8	0.3	0.0	n.s.	0.7
Others	1.1	0.6	n.s.	1.0	0.5	0.0	n.s.	0.8
<i>N</i>	1,666	1,714		1,922	1,095	363		3,380

Information Technology	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Persons who help Older Persons with the use of these gadgets								
None	53.0	40.6		48.3	42.8	41.9		46.7
Spouse	11.7	14.0		13.5	11.6	9.4		12.9
Son	31.1	34.3		31.6	35.6	36.0		32.7
Daughter	12.6	19.1		15.5	15.8	21.5		15.9
Son-in-law	7.1	13.8		9.4	13.4	13.0		10.5
Daughter-in-law	2.7	3.6	*	2.7	3.0	8.5	n.s.	3.2
Grandchild	9.1	15.7		10.9	16.0	19.5		12.5
Brother	0.1	0.5		0.4	0.1	0.2		0.3
Sister	0.1	0.6		0.4	0.3	0.0		0.4
Other relatives	2.4	2.7		2.5	2.3	4.3		2.6
Friends	2.9	3.1		2.8	3.3	4.4		3.0
Others (neighbour, house help, etc.)	0.3	0.3		0.3	0.3	0.0		0.3
N	1,572	1,589		1,824	1,015	322		3,161

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Respondents were also asked who assists them in using IT gadgets. Surprisingly, almost half of OPs do not need any assistance. More males than females can use IT gadgets by themselves. The top four people who help OPs are their son (32.7%), daughter (15.9%), spouse (12.9%), and grandchild (12.5%). The assistance provided by a son or daughter or grandchild increases with the OP's age. Similarly, the assistance of a daughter-in-law increases significantly as the OP gets older. On the other hand, the assistance of spouse declines with the increase of the OP's age.

Summary, Conclusions, and Recommendations

Vietnamese OPs have combined sedentary, physical, and nurturing lifestyles. Nearly 90% of households have TVs (as shown in chapter 3), and it is not surprising that 80% of OPs watch TV daily. However, there is no additional data on how many hours they actually spend on watching TV, with whom they watch TV, and what programmes they regularly view. The collection of this data in future studies can further help provide information on the overall quality of life of Vietnamese OPs.

The LSAHV data showed that two-thirds of the OPs perform physical exercise and gardening daily. These findings show that the OPs are aware of maintaining good health during their retirement age. One limitation of the LSAHV is that the information on the types of physical exercise that OPs are engaged in was not collected. As this information is useful to identify the types of physical exercise that can be incorporated in the physical exercise programmes for OPs, future studies should consider collecting this information.

Generally, OPs participate less frequently in social activities than their younger counterparts. Nevertheless, the LSAHV data revealed that less than 10% of OPs attend social activities at least once a month, and their attendance in social activities declines with age. This low participation rate in social activities has alerted their families and communities to encourage OPs to participate in more diversified social activities such as social dancing, Zumba, tree planting, walking and/or jogging as a group, games/competitions, visiting sick members, tours, and movie showings.

The LSAHV revealed that religion has less influence in the daily lives of Vietnamese OPs, as only 9.3% claim that religion is essential in their lives. The LSAHV results indicated extremely low proportions of OPs who participate in various religious activities, whether directly or indirectly, inside or outside the home, and in public or private places. Only 3.2% are currently members of any religious group or organisation.

Loneliness does not link directly to social isolation. People who live alone do not always feel lonely or isolated, whilst some people may feel lonely even though they are surrounded by their family and friends. Retirement, migration, and poor health and/or loss of mobility may be the contributing factors to both loneliness and isolation, which in turn lead to social network disruption (Wenger et al., 1996). Based on LSAHV findings, majority of Vietnamese OPs are not lonely. Only a small proportion feel a lack of companionship, feel left out, or feel isolated from others. This may be partly attributed to the companionship and assistance provided by family members when needed, and most OPs do not live alone. The levels of perceived social isolation from friends and relatives not residing with OPs are consistently low as their level of loneliness. On the other hand, OPs are satisfied with the quality and quantity of contact with friends and relatives not residing with them.

Advances in information and communication technology (ICT) have brought significant changes on the daily life of OPs. ICT facilitates OPs to reconnect with the outside world; strengthen their family relations, friendships, and social network; reduce isolation; and access health information. However, only a small proportion (12.7%) in the LSAHV have access to the Internet, and nearly half of those with Internet access have either Facebook and/or Zalo accounts. Those with Internet access spend an average of 2.3 hours daily on the Internet. Cell phone is the most commonly used IT gadget by OPs whilst tablets and laptops are not common. OPs mainly use IT gadgets to connect with family and friends through the assistance of their sons, daughters, spouses, or grandchildren, amongst others. Given the low number who have access to the Internet, there is a need to raise this number amongst Vietnamese OPs. This can be achieved by providing training programmes and workshops aimed at promoting the advantages of Internet connectivity and assisting OPs in the use of IT gadgets. Policymakers should work closely with Internet providers for a more affordable Internet access to OPs and consider subsidising the purchase of IT gadgets to attract more new OP users. Online social networking helps strengthen and expand OP social networks beyond their residential communities. However, the effects of online social networking on loneliness and social isolation need to be further studied.

References

- Baecker, R., K. Sellen, S. Crosskey, V. Boscart, and B.B. Neves (2014), 'Technology to Reduce Social Isolation and Loneliness', ACM 978-1-4503-2720-6/14/10.
- Brown, P.H. and B. Tieney (2009), 'Religion and Subjective Well-being among the Elderly in China', *The Journal of Socio-Economics*, 38(2), pp.310–19.
- Chan, A., P. Raman, S. Ma, and R. Malhotra (2015), 'Loneliness and All-cause Mortality in Community-dwelling Elderly Singaporeans', *Demographic Research*, 32(49), pp.1361–82.
- Cornwell, E.Y. and L.J. Waite (2009), 'Social Disconnectedness, Perceived Isolation, and Health among Older Adults', *Journal of Health and Social Behavior*, 50(1), pp.31–48.
- Golden, J., R.M. Conroy, and B.A. Lawlor (2009), 'Social Support Network Structure in Older People: Underlying Dimensions and Association with Psychological and Physical Health', *Psychology, Health, and Medicine*, 14(3), pp.280–90.

- Hughes, M.E., L.J. Waite, L.C. Hawkey, and J.T. Cacioppo (2004), 'A Short Scale for Measuring Loneliness in Large Surveys: Results from Two Population-based Studies', *Research on Aging*, 26(6), pp.655–72.
- Lubben, J.E. and M. Gironde (2003), 'Centrality of Social Ties to the Health and Well-being of Older Adults', in B. Berkman (ed.), *Social Work and Health Care in an Aging Society: Education, Policy, Practice, and Research*. Heidelberg, Germany: Springer. pp.319–50.
- Keranen, N.S., M. Kangas, M. Immonen, H. Simila, H. Enwald, R. Korpelainen, and T. Jamsa (2017), 'Use of Information and Communication Technologies among Older People with and without Frailty: A Population-Based Survey', *Journal of Medical Internet Research*, February 2017, 19(2), pp.e29.
- Okun, M.A. and W.A. Stock (1987), 'Correlates and Components of Subjective Well-being among the Elderly', *Journal of Applied Gerontology*, 6(1), pp.95–112.
- Pullum, E. and R.C. Akyil (2017), 'Loneliness and Social Isolation among Elderly People', *Meandros Medical and Dental Journal*, 18, pp.158–63.
- Stephoe, A., A. Shankar, P. Demakakos, and J. Wardle (2013), 'Social Isolation, Loneliness, and All-cause Mortality in Older Men and Women', *Proceedings of the National Academy of Sciences of the United States of America*, 110(15), pp.5797–801.
- Tuyen, Q.T., Q.N. Thanh, V.V. Huong, and T.D. Tinh (2015), 'Religiosity and Life Satisfaction among Old People: Evidence from a Transitional Country', MPRA Paper No. 81360, posted 15 September 2017. <https://mpra.ub.uni-muenchen.de/81360/> (accessed 12 November 2019).
- Wenger, G.C., R. Davies, S. Shahtahmaseb, and A. Scott (1996), 'Social Isolation and Loneliness in Old Age: Review and Model Refinement', *Ageing and Society*, 16, pp.333–58.
- Yang, Y. (2006), 'How Does Functional Disability Affect Depressive Symptoms in Late Life? The Role of Perceived Social Support and Psychological Resources', *Journal of Health and Social Behavior*, 47(4), pp.355–72. <https://www.jstor.org/stable/30040327> (accessed 12 November 2019).

Services for Older Persons

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

Caring for Vietnamese older persons (OPs) has always been the priority of the Communist Party of Viet Nam and the government of Viet Nam. The 1946, 1959, and 1992 constitutions clearly addressed the responsibilities of government, children, grandchildren, and everyone to OPs. The government took serious action to support OPs by issuing the Law on the Elderly on 23 November 2009. This law remains the highest level of legal document to cover issues related to OPs. It includes 6 chapters and 31 articles that define the rights and obligations of individuals and organisations in caring for and supporting OPs.

Besides this law are many approved policies to ensure the economic well-being, social life, health, and healthcare of OPs. For example, the labour law defines the retirement age for OPs; the marital act states that children and grandchildren aged 18+ have to respect and take care of OPs in the household. The Prime Minister also approved the National Action Plan for the Elderly in Viet Nam from 2012 to 2020 (issued following Decision No. 1781/QĐ-TTg in 2012). This plan emphasised improving social insurance, health insurance, and pension for OPs. Consequently, this plan solved the risk on the welfare and healthcare for OPs. Furthermore, the Ministry of Health in 2013 included the indicator ‘the number of beds for elderly patients’ in the list of criteria for assessing the quality of hospital services. The ministry published Circular No. 2248/BYT-KCB in 2018 on the establishment of geriatrics departments and healthcare for OPs in provincial hospitals to meet the growing demand for protection of the health of OPs in accordance with the Law on the Elderly of 2009 (No. 39/2009/QH12).

One priority area for OPs is decision-making. OPs can contribute to the process of policymaking and implementation of programmes on economic and social progress. To complete these goals, the National Committee on Ageing was established in 2005. This organisation is represented in the National Assembly and has set up 10,000 associations for OPs in communities as well. Statistics show that, since 2007, the government has provided pension and free healthcare for OPs over age 85, and then reduced the beneficiaries' ages to 80+ in 2012.

Another milestone in caring for OPs is expressed in the revised Constitution of 2013. In this revision, the OPs' right to healthcare was specified in more detail. It stated the need to develop a social security system to assist OPs.

Despite the efforts of the government, the Ministry of Health and other organisations have been bringing good health services, social health insurance, money assistance, payment for funeral and burial services, etc. to OPs. However, some services still need to be improved. One of these is the homes for the aged. Whilst such homes are common in Western countries, they are still not popular in Viet Nam. The most significant reason is that the family continues to be the primary provider of support for its members in all stages of the life cycle. Taking care of OPs in the household is not only the traditional culture in Vietnamese families but also the obligation defined by law. Moreover, a stigma is attached when OPs are institutionalised in home-care facilities. This is because intergenerational family solidarity remains strong and co-residence with family members is still the most common living arrangement for many OPs. Accordingly, the dependency of the co-residence paradigm holds true and is based on the widespread expectation that children will take care of OPs. The other reason for the rareness of homes for the aged is that the cost of their services is usually higher than the average income of OPs.

Whilst the family continues to be the primary care provider of OPs, changes in social and cultural norms are posing different challenges to the traditional structure of the Vietnamese family. These changes have also gradually weakened the traditional old-age support mechanism needed by OPs. These challenges have been amplified by the rise in the number of OPs who need long-term care. This fact leads to the question of how OPs perceive the idea of homes for the aged. Thus, in the 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV), OP respondents who passed the cognitive impairment tests were asked the following questions: Do Vietnamese OPs

think it is a good idea to have homes for the aged? If there were homes for the aged near the OP's current residence, would the OP ever want to live in such a place? Healthcare and other services for OPs, such as free medications against certain diseases, are discussed in chapter 6 of this publication. This chapter will provide an initial analysis of the LSAHV baseline data on Vietnamese OPs' awareness and use of services for OPs as well as their attitudes towards homes for the aged, by sex and age group.

Government Privileges for Older Persons

Despite the effort to improve OPs' awareness of their rights, few OPs know about the government's programmes for them. Based on the survey of 6,050 respondents, the 2018 LSAHV indicated that the proportion who are aware of the different privileges provided for them by the government remains low at 27%, with more males than females being aware of such privileges (Table 10.1). Although there is no clear pattern in terms of age, OPs in the youngest cohort are slightly more aware of these privileges than their older counterparts.

Table 10.1. Awareness and Use of Services by Sex and Age

Awareness and Use of Services	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who have heard about the government's program that provides privileges to senior citizens 60 years and above	31.8	23.4	**	27.7	25.7	26.8	n.s.	27.0
N	2,570	3,480		2,638	2,004	1,408		6,050
% with a senior citizen ID card	87.1	83.9	n.s.	87.5	83.2	81.8	n.s.	85.5
N	811	804		717	538	360		1,615
% who have availed of the following privileges:								
Priority to use medical services	41.2	44.8	n.s.	35.6	39.2	76.6	n.s.	43.0
Discount from establishments for public transportation services, sightseeing	41.7	43.3	n.s.	40.6	45.1	45.9	n.s.	42.5
Legal aid to OPs	27.0	27.3	n.s.	26.2	25.3	33.6	n.s.	27.1
Assistance for poor OPs or those without family support	24.3	28.7	n.s.	24.3	28.0	32.7	n.s.	26.5
Funeral service for poor OPs or those without family	21.0	22.4	n.s.	21.5	20.4	24.3	n.s.	21.7
Income tax exemption for person aged 65 and above	25.2	25.8	n.s.	23.4	26.7	31.9	n.s.	25.5
Priority loan (low interest)	17.1	17.1	n.s.	16.4	18.2	18.3	n.s.	17.1

Awareness and Use of Services	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Longevity-wishing ceremony (90+)	21.1	25.0	n.s.	19.2	22.5	38.1	n.s.	23.0
Re-participation in social activities	19.7	22.8	n.s.	21.8	20.2	20.7	n.s.	21.2
<i>N</i>	686	642		603	439	286		1,328
% who have used the following privileges: Longevity-wishing ceremony (90+)	42.6	56.9	n.s.	-	-	-		49.1
<i>N</i>	25	29		-	-	-		54
% who are recipients of the monthly social pension given by the Department of Social Welfare and Development	25.3	21.9	n.s.	15.5	19.4	56.4	**	23.4
<i>N</i>	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, ** $p < 0.01$, n.s. = not significant.

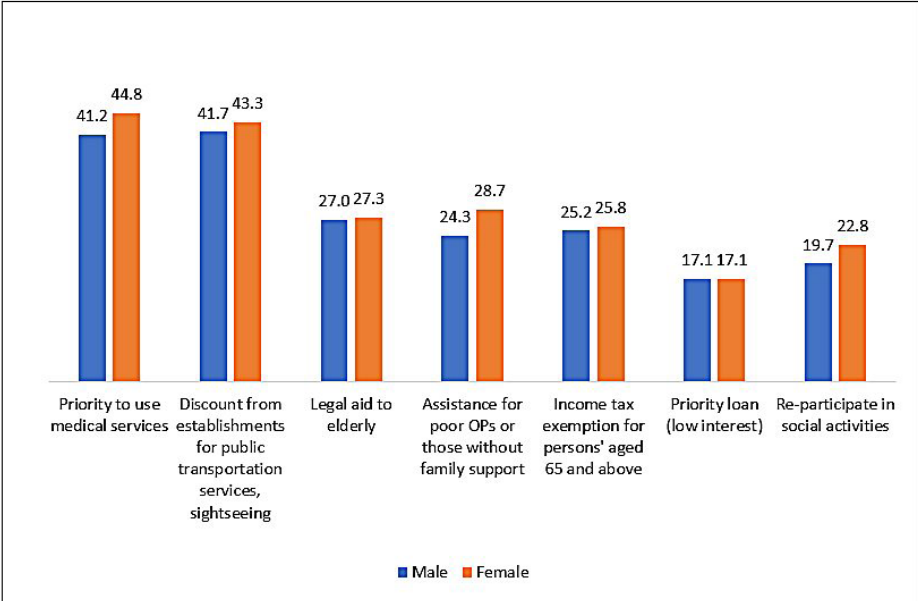
Source: Calculated by PHAD using original LSAHV data.

Amongst OPs who are aware of their privileges, 85.5% own a senior citizen ID card. More males than females have a senior citizen ID card. Furthermore, more OPs in the youngest cohort have a senior citizen ID card compared to those in the oldest cohort (87.5% compared to 81.8%).

Figure 10.1 reveals that the most frequently used privileges of OPs are the priority to use medical services and the discounts on transportation, legal aid, assistance to poor OPs, income tax exemption, longevity-wishing ceremony for those aged 90+, in this order. The least commonly used privilege is the priority loan with low interest. That means OPs do not want to risk in investments. Female OPs use the privileges more than the males (Figure 10.1). However, there is no clear difference in pattern between males and females in using the privileges.

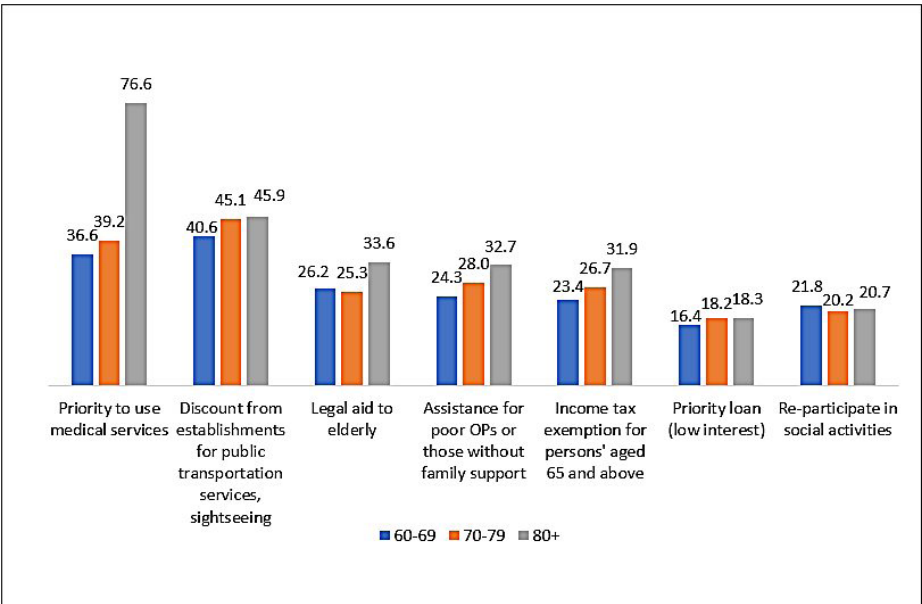
On the other hand, Figure 10.2 shows the use of different privileges by age group. Whilst there is no clear age pattern for most of the services used, a higher proportion of those aged 80 and above relative to those in their 60s take advantage of the priority to use the medical services in government health facilities. The data clearly shows that the percentage of the oldest OP group using the priority medical services is more than two times that of the youngest OP group (76.6% compared to 35.6%).

Figure 10.1. Use of Privileges by Sex (%)



Source: Calculated by PHAD using original LSAHV data.

Figure 10.2. Use of Privileges by Age Group (%)



Source: Calculated by PHAD using original LSAHV data.

One interesting thing from Table 10.1 is that the number of female OPs using the privileges on longevity-wishing ceremony for the 90+ group is more than the male OPs. From this statistical data can be inferred that women live longer and have a greater lifespan than men. The 2018 LSAHV also asked about the proportion of indigent OPs who receive the monthly social pension given by the Department of Social Welfare and Development. Only 23.4% of OPs are recipients of the monthly social pension, with significantly more recipients amongst those aged 80 and above (56.4%). There is no difference between male and female OPs in terms of receiving the monthly social pension.

Attitudes towards Homes for the Aged

Table 10.2 shows that half of the OPs think it is a good idea to have homes for the aged. This verifies the bonding in Vietnamese families. Many generations live in one household, and the children and grandchildren have the responsibility to take care of the OPs. Amongst those who think it is a good idea to have homes for the aged, the majority believe such facilities are beneficial for those who have no one to take care of the OPs (67.3%). Other reasons cited were that the OP's family would be spared from the burden of caring for the OP (58.3%), that the OP's health would be better taken care of in such a facility (54.2%), and the OP also has a better chance to socialise and enjoy with those of the same age (52%).

Amongst the 38.5% of OPs who think it is not a good idea to have homes for the aged, the following reasons were cited: the family should take care of the OP (70.1%); the OP will miss family (45.7%); the OP would not want to live with strangers (23.7%); and the high cost in the home for the aged (12.9%). Surprisingly, only a low percentage of OPs think that placing the OP in a nursing home is shameful for the family (8.4%). A slightly higher proportion of females said that being in a nursing home would bring shame to the family (9.0% compared to 7.4% of male OP respondents).

Amongst 11.8% of OPs who answered 'Depends' when asked if it is a good idea to have homes for the aged, 64.3% think having homes for the aged is a good idea if the OP is abandoned; 63.9%, if children do not want to take care of their OP parents; 56.4%, if the OP has no children or grandchildren; 48.6%, if the children do not treat their elderly parents well; and 40.2%, if the conditions and treatment in the home for the aged are good.

Table 10.2. Attitudes Towards Homes for the Aged by Sex and Age

Attitudes	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who think it's a good idea to have homes for the aged								
Yes	51.9	48.0		51.1	48.3	46.6		49.7
No	35.4	40.9	n.s.	36.1	41.4	43.2	n.s.	38.5
Depends	12.7	11.1		12.8	10.4	10.4		11.8
N	2,308	3,022		2,394	1,780	1,156		5,330
Amongst those who think it's a good idea to have Homes for Aged								
Spare the family from burden of caring for the older person	60.2	56.8	n.s.	60.1	55.7	55.2	n.s.	58.3
Health will be better taken care of	56.9	52.0	n.s.	53.7	55.3	54.6	n.s.	54.2
Better chance to socialise with people of same age	57.5	47.5	n.s.	53.6	47.3	53.2	n.s.	52.0
Beneficial for those who have no one to care for them	69.5	65.5	n.s.	66.8	70.5	64.4	n.s.	67.3
Others (better facilities, life is easier, etc.)	1.4	1.3	n.s.	1.4	0.8	1.9	n.s.	1.3
N	1,187	1,481		1,262	885	521		2,668
Amongst those who think it is not a good idea to have homes for the aged								
The family should take care of the older person	73.2	68.0	n.s.	72.1	68.6	66.1	n.s.	70.1
OP will miss family	44.0	46.8	n.s.	46.1	43.0	48.3	n.s.	45.7
OP will not want to live with strangers	23.4	23.8	n.s.	24.6	23.2	21.2	n.s.	23.7
Expensive	11.9	13.6	n.s.	13.6	14.0	9.2	n.s.	12.9
Shameful for the family	7.4	9.0	n.s.	8.9	7.5	7.7	n.s.	8.4
Others (feels like in prison, will be sickly there, etc.)	2.4	2.6	n.s.	1.8	4.6	1.6	n.s.	2.6
N	838	1,213		835	689	527		2,051
Amongst those answered 'it depends' whether homes for the aged is a good idea								
If OP is abandoned	63.4	65.2	n.s.	63.4	65.1	67.7	n.s.	64.3
If children do not want to care of their elderly parents	61.3	66.2	n.s.	60.2	71.1	70.0	n.s.	63.9
If children do not treat their elderly parents well	44.9	51.9	n.s.	45.4	56.0	52.0	n.s.	48.6
If OP has no children or grandchildren	59.4	53.8	n.s.	59.2	49.9	53.4	n.s.	56.4
If the conditions and treatment in the home for the aged is good	39.7	40.7	n.s.	40.2	39.3	41.8	n.s.	40.2
Others (not sure what is there, if it becomes a law, etc.)	0.8	1.4	n.s.	1.3	1.2	0.0	n.s.	1.1
N	283	328		297	206	108	n.s.	611
Desire to live in a home for the aged if near the current residence								
Yes	18.6	17.0		17.5	17.6	18.7		17.7
No	68.4	70.7	n.s.	69.7	69.9	69.1	n.s.	69.7
It depends	13.1	12.3		12.8	12.5	12.2		12.6
N	2,248	2,833		2,399	1,754	928		5,081

Attitudes	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
If desire to live in a home for the aged is conditional, it depends on the following:								
If OP is abandoned	49.3	37.2	n.s.	44.8	34.2	46.9	n.s.	42.7
If children do not want to care of their elderly parents	58.5	56.6	n.s.	59.7	56.0	49.6	n.s.	57.5
If children do not treat their elderly parents well	43.2	37.8	n.s.	43.6	33.5	36.0	n.s.	40.2
If OP has no children or grandchildren	47.5	36.0	n.s.	44.3	37.4	33.8	n.s.	41.3
If the conditions and treatment in the home for the aged is good	35.5	34.5	n.s.	36.1	34.4	30.2	n.s.	34.9
Others (if near home, if older person is no longer comfortable living with family, etc.	1.4	1.8	n.s.	1.2	1.6	3.4	n.s.	1.6
N	373	447		410	263	147		820
% who want to live in a home for the aged now if it is near their current residence								
Yes	43.0	44.5		45.7	44.8	37.8		43.9
No	30.8	29.5	n.s.	25.2	31.3	41.6	n.s.	30.1
It depends	26.2	26.0		29.1	23.8	20.6		26.1
N	826	1,141		822	615	530		1,967
If desire to live in a home for the aged now is conditional, it depends on the following:								
If OP is weak and sickly	22.8	26.0	n.s.	25.8	20.5	26.1	n.s.	24.7
If OP has no place to live/abandoned	46.0	42.6	n.s.	47.8	42.0	35.7	n.s.	44.0
If children do not want to care of their elderly parents/if older person becomes a burden	48.6	49.5	n.s.	49.4	56.8	40.2	n.s.	49.1
If children do not treat their elderly parents well	31.9	34.4	n.s.	37.0	29.3	27.7	n.s.	33.4
If older person has no children or grandchildren	34.1	30.9	n.s.	35.1	34.2	21.9	n.s.	32.2
If the conditions and treatment in the home for the aged is good	34.5	34.0	n.s.	38.7	35.2	20.9	n.s.	34.2
If children will allow	11.0	9.0	n.s.	12.6	7.5	4.7	n.s.	9.8
Others (if no one cares, if many older persons will also live there, etc.)	0.9	4.0	n.s.	4.0	0.6	1.5	n.s.	2.7
N	277	394		302	190	179		671

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Even though most OPs think having homes for the aged is a good idea, more than two thirds (69.7%) do not want to live in a care facility. For those whose desire to live in a home for the aged is conditional, the following reasons were cited: if children do not want to take care of their OP parents (57.5%), if the OP is abandoned (42.7%), if the OP has no children or grandchildren (41.3%), if children do not treat their OP parents well (40.2%), and if the conditions and treatment in the home for the aged are good (34.9%). Only 1.6% will conditionally live in a facility if the home for the aged is near home and if the OP is no longer comfortable living with family.

When OP respondents were asked whether they would want to live in a home for the aged now if it is near their current residence, 43.9% responded yes. Those who said their desire to reside in such a facility now is conditional cited the following reasons: if children do not want to take care of their parents or if the OP becomes a burden (49.1%), if the OP has no place to live/is abandoned (44.0%), if the conditions and treatment in the home for aged are good (34.2%), and if children do not treat their OP parents well (33.4%). Only 1 in 10 said if children will allow them to live in a home for the aged. This means OPs still have a critical role in the household and can decide by themselves.

Summary, Conclusions, and Recommendations

The study demonstrated a low level of awareness amongst Vietnamese OPs of the government's programmes that provide privileges to senior citizens. Awareness of their privileges corresponds to the use of services. The percentage with a senior citizen ID card is higher for male OPs and those belonging to the youngest cohort. Due to the low level of awareness, the government should have more programmes to increase OPs' awareness of their privileges. The government, via communication at different levels, can provide information and more details regarding policies and programmes to assist and support OPs.

The findings also revealed that OPs have started to think of living in a home for the aged. There is a greater proportion towards institutional living, particularly amongst the male OPs and those in the younger cohort (60–69). Most OPs think that living in a home for the aged is beneficial for those who do not have anyone to care for them. They believe that the OPs' health will be better taken care of under such a set-up.

The minority who do not approve of this living arrangement believe that family members should take care of their OPs as the OPs will miss their family if they live with strangers. Few OPs perceive this practice as shameful, implying that a cognitive change is happening amongst Vietnamese families. The change in social and cultural norms about homes for the aged corresponds to the expected rise in illnesses that will require long-term care and the busy lifestyle of young families. The long-term care for OPs in nursing homes will need support from the government and organisations in arranging living spaces, and financial and mental assistance.

References

- National Assembly of the Socialist Republic of Vietnam (2009), The Law on the Elderly, Law No. 39/2009/QH12. Ha Noi.
- Ministry of Health (2018), Circular on Establishment of Geriatrics Departments and Health Care for the Elderly, Circular No. 2248/BYT-KCB. Ha Noi.
- The Prime Minister (2012), National Action Plan for the Elderly in Vietnam from 2012 to 2020 in Decision No. 1781/QD-TTg in 2012. Ha Noi.

Family Support and Intergenerational Exchanges

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

Families in Viet Nam are classified into two: the traditional patriarchal family and the modern nuclear family. In traditional patriarchal families, several generations live in one house and are typical in rural areas. In modern nuclear families, only parents and children live together, usually in urban areas. Associated with each type of family is a typical characteristic of the relationship between the old parents and co-resident and non-co-resident adult children. These relationships between parents and adult children are particularly important in successful ageing (Cheng et al., 2015).

In the traditional family system, children serve as a crucial safety net that strengthens the well-being of older persons (OPs) when the OPs face any functional decline associated with ageing. This phenomenon is explained by filial piety. Children take responsibility for their ageing parents under moral and legal obligation (Hashimoto and Ikels, 2006). However, many studies proved that Vietnamese OPs are also active providers of support not only to their children but also to their grandchildren (Knodel et al., 2000). These mutual economic, social, and emotional support are especially manifested in co-residence with their children. In this respect, the quality of the relationship between parent and child is a significant predictor of psychological well-being of the OP (Umberson, 1992). Questions were raised about the mutual relationship between non-co-resident children with their old parents, which appears in the modern nuclear families. Is the mutual relationship between OPs and non-co-resident children similar to that of the OPs and co-resident children?

Furthermore, the recent demographic trends have paved the gradual decline of the traditional values of filial piety and the increasing number of modern nuclear families.

We do not know if this mutual support between old parents and adult children still persists or whether it has changed in recent years. Hence, this chapter assesses the extent of current support transfers that take place between elderly parents and their co-resident and non-co-resident children. The chapter also examines attitudes towards family support, particularly the expectation and satisfaction of OPs on the financial and other support provided by their children.

The questionnaire of the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) provided an elaborate matrix containing child-specific information on the exchanges of support and social contact between OPs and their co-resident and non-co-resident children in the 12 months before the survey. The survey asked for information on four types of assistance: financial support, material support (e.g. food, clothes, and medicine); instrumental support (e.g. bathing and going to the toilet); and emotional support (e.g. companionship and consultation or advice for troubles). Questions on social contact asked for the frequency of visits and communication through letters, telephone calls, or text messages between OPs and their non-co-resident children.

Social Contact

Table 11.1 shows the patterns of social contact between OPs and their non-co-resident children. This data helps to know the number of OPs who visited or was visited, wrote/called/texted to or received a letter/call/text from at least one child in the past 12 months. There were 85.8% of OPs who visited and 95.0% who were visited by at least one of their non-co-resident children in the 12 months before the survey. Most OPs (93.1%) contacted their non-co-resident offspring through letters, telephone calls, or text messages whilst 96.4% received such communication from their children. This high frequency of social contact between OPs and non-co-resident proved the close relationship between them even if they do not live together.

Although there are no significant sex differences in the social exchanges between OPs and their non-co-resident children, male OPs are more likely to contact their non-co-resident children than female OPs. Similarly, communication initiated by non-co-resident children is slightly more towards their fathers than their mothers. As expected, when OPs get older, the proportion of OPs who visited and wrote, called, or texted their non-co-resident declines.

Table 11.1. Social Contact Between Older Persons and Non-co-resident Children in the Past 12 Months by Sex and Age

Social Contact	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who visited at least one child	86.2	85.5	n.s.	87.9	86.9	77.6	n.s.	85.8
% who wrote, called or texted at least one child	94.0	92.4	n.s.	96.4	91.3	84.8	**	93.1
% who was visited by at least one child	95.3	94.7	n.s.	94.3	96.6	94.7	n.s.	95.0
% who received letters, calls, or text messages from at least once child	96.7	96.1	n.s.	98.2	95.3	92.0	n.s.	96.4
N	2,255	2,902		2,136	1,769	1,252		5,157

Sig = Statistical significance, ** $p < 0.01$, n.s. = not significant

Source: Calculated by PHAD using original LSAHV data.

Provision of Assistance

In addition to social contact, ageing parents also provide various types of support to their children. Table 11.2 shows four different types of assistance – financial, material, instrumental, and emotional support – that OPs give to their co-resident and non-co-resident children. Based on the data, the most common assistance provided by OPs is emotional support (about 78%). It does not matter whether the children live or do not live with their elderly parents. This kind of support declines with age. For example, the emotional support provided by the 60–69 group to their co-resident children and non-co-resident children is 80.7% and 80.9%, respectively, whilst the percentage decreases to 69.4% and 70.6%, respectively, for 80+ OP group.

Table 11.2 shows that 27.2% of OPs financially assisted their co-resident child whilst only 18.7% did the same to their non-co-resident child. This clearly shows that a co-resident child received more financial support from their elderly parents than a non-co-resident child. However, the amount was not provided. It makes sense for a co-resident child to receive more financial support because the OP is aware of said child's financial difficulty. Also, as expected, this kind of support declines with age as the income of OPs declines with age. In two cases, male OPs gave more support to their children than female OPs. However, the differences are not significant. For instance, 29% of male OPs financially supported their co-resident child compared to only 25.8% for female OPs.

Table 11.2. Assistance Provided by Older Persons to Co-resident and Non-co-resident Children in the Past 12 Months by Sex and Age

Assistance Provided by OP	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
To any coresident child								
% who gave financial support	29.0	25.8	n.s.	28.8	27.2	21.7	n.s.	27.2
% who gave material support	32.6	29.5	n.s.	34.6	30.2	19.0	n.s.	30.8
% who gave instrumental support	28.2	24.8	n.s.	29.4	24.8	17.4	n.s.	26.2
% who gave emotional support	77.1	77.6	n.s.	80.7	75.2	69.4	n.s.	77.4
N	1,188	1,706		1,206	980	708		2,894
To any noncoresident child								
% who gave financial support	20.0	17.6	n.s.	20.8	16.1	15.4	n.s.	18.7
% who gave material support	20.9	18.5	n.s.	22.3	15.2	16.7	*	19.5
% who gave instrumental support	10.0	10.5	n.s.	12.1	7.9	7.8	n.s.	10.3
% who gave emotional support	78.3	77.3	n.s.	80.9	75.6	70.6	n.s.	77.7
N	2,254	2,899		2,134	1,768	1,251		5,153

Sig = Statistical significance, * $p < 0.05$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

The third kind of support that OPs provided their children is material support. A co-resident child received this type of support from 30.8% of OPs, whilst only 19.5% of OPs gave material support to any of their non-co-resident children. Because the OPs and child live together, they share necessities such as food, clothes, medicines, etc. Hence, the percentage of OPs who provided this support to their co-resident child is much higher than those who provided to their non-co-resident child. Similar to financial support, more male than female OPs provided material support to their children. This support decreases when OPs get older.

Lastly, 26.2% of OPs provided instrumental support to children living with them, which is not surprising given the expected healthier condition of adult children compared to the ageing respondents. In contrast, only 10.3% of OPs did the same thing to their non-co-resident children. The differential patterns with sex and age are similar to the cases of financial and material support regardless of living arrangement.

Receipt of Assistance

Consistent with earlier studies, the LSAHV data showed that Vietnamese OPs not only provide support to but also receive support from their children (Table 11.3).

About three in five OPs received monetary assistance from their children in the 12 months before the survey regardless of residence (65.4% from co-resident children and 61.6% from non-co-resident children). About 71% of OPs received material support from their co-resident children whilst 61% received material support from their non-co-resident children. The level of instrumental support received by OPs is much lower than material support, with 56.6% of OPs receiving instrumental support from their co-resident children and 30.4% receiving it from their non-co-resident children. Emotional support is predominant. The results indicated that 84.4% and 84.7% of OPs receive emotional support from their co-resident and non-co-resident children, respectively.

Table 11.3. Assistance Received by Older Person from Co-resident and Non-co-resident Children in the Past 12 Months by Sex and Age

Assistance Received by OP	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
From any coresident child								
% who received financial support	60.1	69.5	n.s.	62.0	67.8	73.6	n.s.	65.4
% who received material support	67.2	75.2	n.s.	67.2	75.1	82.5	n.s.	71.8
% who received instrumental support	50.2	61.5	n.s.	50.9	60.5	70.5	n.s.	56.6
% who received emotional support	84.1	84.6	n.s.	82.3	86.4	88.6	n.s.	84.4
N	1,188	1,706		1,206	980	708		2,894
From any noncoresident child								
% who received financial support	58.5	64.0	n.s.	57.7	63.0	72.4	n.s.	61.6
% who received material support	58.2	63.2	n.s.	57.3	61.5	72.2	n.s.	61.0
% who received instrumental support	28.0	32.3	n.s.	28.2	30.2	38.1	n.s.	30.4
% who received emotional support	84.8	84.6	n.s.	84.7	82.6	87.5	n.s.	84.7
N	2,254	2,899		2,134	1,768	1,251		5,153

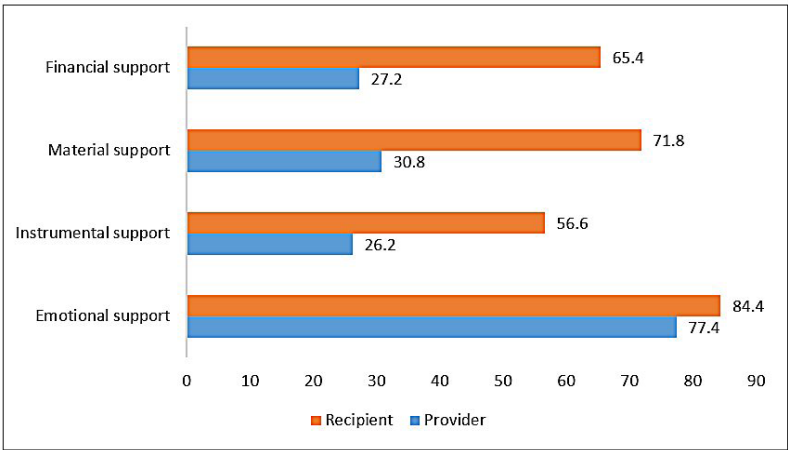
Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Overall, OPs received more support from co-resident children than non-co-resident regardless of the type of support. The pattern of support received is similar to those provided by OPs. Female OPs are more likely than male OPs to receive all types of support from their children regardless of living arrangement. In terms of age, children support the oldest cohort more compared to the youngest cohort, regardless of living arrangement. As expected, the oldest OPs receive more support from children as their physiological condition declines with age.

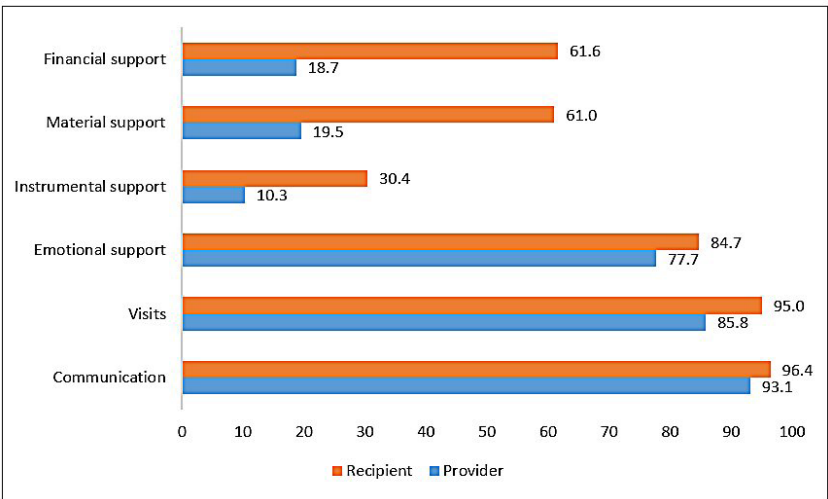
OPs are more likely to be recipients than providers of financial, material, instrumental, and emotional support for both co-resident and non-co-resident children when comparing the intergenerational flows of support (Figures 11.1 and 11.2). In terms of social contact, children initiate more social contact than OPs (Figure 11.2).

Figure 11.1. Exchange of Assistance between Older Person and Co-resident Children (%)



Source: Calculated by PHAD using original LSAHV data.

Figure 11.2. Social Contact and Exchange of Assistance between Older Person and Non-co-resident Children (%)



Source: Calculated by PHAD using original LSAHV data.

Exchange of Financial Support

During discussions on the mutual financial support amongst OPs and children, the question of how much money they support each other was raised. Table 11.4 provides a closer look at the financial exchanges between OPs and their children. About 6% of OPs reported giving a large sum of money to any of their children in the past 12 months. This money was intended to support the child's business, medical expenses, travel abroad, and other special purposes such as payment for wedding expenses or purchase of a house. Although there are no significant gender and age disparities in the percentage of OPs who gave their children a large amount of money, the percentage decreases with age. The amount given by parents ranges from 1 million Vietnamese dong (VND) to VND 3 million (from US\$43 to US\$129), with a median of VND 1.8 million or about US\$78.

Table 11.4. Exchange of Financial Support Between Older Persons and Children by Sex and Age

Exchange of Financial Support	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who gave a large amount to any child in the past 12 months to start a business, special medical expense, travel abroad, or some other special purpose	6.2	5.7	n.s.	6.7	5.0	4.6	n.s.	5.9
N	2,455	3,240		2,452	1,906	1,337		5,695
Median amount given to any of the children	3,000,000	1,000,000	*	2,000,000	1,000,000	1,000,000	*	1,800,000
N	102	146		121	78	49		248
% who received monthly financial support from any of the children	33.2	37.3	n.s.	32.8	38.7	40.2	n.s.	35.5
N	2,449	3,236		2,445	1,905	1,335		5,685
Median amount of financial support received monthly from any of the children	1,000,000	1,000,000	n.s.	1,100,000	1,000,000	1,000,000	***	1,000,000
N	511	735		488	450	308		1,246

Sig = Statistical significance, * $p < 0.05$, *** $p < 0.001$, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

Conversely, 35.5% of OPs receive monthly financial assistance from their children; mothers are more financially dependent on their children compared to fathers (37.3% vs 33.2%, respectively).

Attitudes towards Family Support

What are the attitudes of OPs towards family support? Are they satisfied with the frequency of contact with, or assistance given by, their children? The data in Table 11.5 gives the answers to those questions. It reveals that a quarter of OPs (25.2%) intend to rely on their children for financial support. This number is much smaller than the proportion who receive monthly financial support from any of the children (35.5% as shown in Table 11.4). More females (29.5%) than males (19.9%) plan to rely on their children for financial support. As expected, the number of OPs who plan to rely on their children increases with age. The percentage of OPs who plan to be economically dependent on their children rises from 21% in the youngest cohort to 39.9% in the oldest cohort.

Table 11.5. Attitudes Toward Family Support of Older Person by Sex and Age

Attitudes toward Family Support	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who plan to rely on children for financial support	19.9	29.5	n.s.	21.0	28.1	39.9	n.s.	25.2
N	2,175	2,660		2,301	1,661	873		4,835
Satisfaction with level of contact with children								
Very satisfied	63.9	62.4		65.4	59.8	58.0		63.1
Satisfied but can be improved	33.2	35.2	n.s.	32.1	38.4	37.3	n.s.	34.3
Not satisfied	2.9	2.4		2.5	1.8	4.7		2.6
Satisfaction with level of assistance given by children								
Very satisfied	59.7	58.2		59.3	58.3	57.6		58.9
Satisfied but can be improved	34.3	34.0		32.9	35.8	36.7		34.1
Not satisfied	2.4	3.1	n.s.	2.8	2.3	3.9	n.s.	2.8
Not getting any assistance from any child	3.6	4.7		5.0	3.6	1.8		4.2
N	2,092	2,585		2,209	1,616	852		4,677

Sig = Statistical significance, n.s. = not significant.

Source: Calculated by PHAD using original LSAHV data.

More than 95% of OPs are delighted (63.1% are very satisfied and 34.3% are satisfied) with the level of contact they have with their children; only 2.6% said they are not satisfied. There are notable age differentials, with OPs aged 80+ registering the highest proportion who are not satisfied (4.7%) with the current social set-up.

When asked about their satisfaction with the level of assistance they receive from their children, 58.9% of OPs reported being very satisfied, 34.1% are satisfied, and only 2.8% are not satisfied. It is worth noting that 4.2% of OPs do not get any form of assistance at all from their children. Slightly more females (3.1%) than males (2.4%) expressed dissatisfaction whilst those aged 60–69 registered the highest proportion (59.3%) who are very satisfied.

Summary, Conclusions, and Recommendations

The LSAHV data revealed that Vietnamese OPs are not only recipients but also providers of all forms of support examined in the study. The findings are consistent with those of earlier studies that documented the high involvement of Vietnamese OPs in various forms of exchanges of support with their children. This chapter also shows that OPs' dependency on children increases, and the support given by OPs to children decreases with age.

In general, OPs remain supportive to their children despite their advanced age and limited resources. Comparing provision and receipt of support, ageing parents tend to be dependent on their children economically (financial and material support) and, to a lesser extent, in the conduct of daily activities (instrumental support). In return, they are more commonly relied upon for companionship and consultation (emotional support) as they have longer and richer life experiences. These provide evidence that intergenerational exchange of resources is a reciprocal process.

A high level of mutual support exchanges between OPs and their co-resident children was observed in the current study. This is probably due to the traditional family system in Viet Nam where ageing parents live with their children, which appears to benefit both parties. A similar trend is also observed between elderly parents and their non-co-resident children, and that mutual support exchanges are independent of living arrangement. This implies that Vietnamese OPs still practice traditional beliefs that adult children are responsible for their elderly parents and that OPs are aware

of their duty to provide the best to their children. This also suggests that traditional values of filial piety still remain strong in Viet Nam.

Basically, mothers are more likely to receive assistance from their children, whereas fathers are more likely to provide support to their children. The disadvantaged situation of female OPs in terms of employment (see chapter 3) and their limited personal resources (see chapter 7) are also reflected in intergenerational exchanges of support.

In terms of age, elderly parents tend to be recipients of support compared to the younger cohort of OPs, whilst the latter have a higher propensity to be providers of support than the former, particularly in helping co-resident children.

Despite the traditional beliefs that adult children are obliged to take care of their elderly parents, a large majority of Vietnamese OPs desire financial independence. Policymakers should consider measures aimed at easing the reliance of OPs on their children for old-age support. This may include expanding job opportunities beyond retirement (particularly for women); increasing old-age pension; and providing higher subsidies and discounts on medicines, groceries, and transportation fares. Further understanding of the underlying factors associated with intergenerational support exchanges could help reduce dependency of Vietnamese OPs.

References

- Biddlecom, A., N. Chayovan, and M.B. Ofsteda (2002), 'Intergenerational Support and Transfers', in A.I. Hermalin (ed.), *The Well-being of the Elderly in Asia: A Four-country Comparative Study*. Ann Arbor, MI: The University of Michigan Press. pp.185–229.
- Cheng, S-T., H.H. Fung, L.W. Li, T. Li, J. Woo, and I. Chi (2015), 'Successful Aging: Concepts, Reflections, and its Relevance to Asia', in S-T. Cheng, I. Chi, H.H. Fung, L.W. Li, and J. Woo (eds.), *Successful Aging: Asian Perspectives*. Dordrecht, The Netherlands: Springer. pp.1–21.
- Hashimoto, A. and C. Ikels (2006), 'Filial Piety in Changing Asian Societies', in M.L. Johnson (ed.), *The Cambridge Handbook of Age and Ageing*. New York, NY: Cambridge University Press. pp.437–42.

- Knodel, J., J. Friedman, S.A. Truong, and T.C. Bui (2000), 'Intergenerational Exchanges in Vietnam: Family Size, Sex Composition, and the Location of Children', *Population Studies*, 54(2000), pp.89–104.
- Umberson, D. (1992). 'Relationships between Adult Children and their Parents: Psychological Consequences for Both Generations', *Journal of Marriage and the Family*, 54(3), pp.664–74. [doi:10.2307/353252](https://doi.org/10.2307/353252) (accessed 20 November 2019).

Caregiving in Vietnamese Family

Elma P. Laguna

One feature of the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is the survey of primary and potential caregivers. This component of the study was primarily designed to ensure additional anchors or modes to contact the older people respondents in succeeding surveys. At the same time, as the first initiative to understand provision of care amongst older persons (OPs) in the country, the survey provides initial impressions on caregiving as a family affair.

Viet Nam traditionally views the family as an important factor in the care of older people. The strong influence of Confucian philosophy is reflected on how the Vietnamese culture defines its moral, philosophical, and social norms (Yao, 2000). Relationship within the family is anchored on the idea of filial piety which shapes parents' expectation of old-age support from children. This is manifested in co-residency, close contacts between parents and children, and financial support and instrumental care, especially for ageing and frail family members (Giang and Pfau, 2007). The family responsibility to care for its older members is not only confined to daily practice but is also strengthened further by government policies (Dam et al., 2009; Truong, 2015). The National Assembly of the Socialist Republic of Vietnam (2009) stipulated in Chapter 2, Section 1, Article 10 of the Law on the Elderly that children, grandchildren, and other relatives have the duty to ensure the well-being of the older adults in the family. This implies that family members are considered the primary caregivers of older people (Truong, 2015).

As discussed in Chapter 11, informal family caregiving refers to the provision of help and assistance to relatives and friends who cannot take care of themselves. In their seminal work on exploring the concepts and measures of caregiving, Pearlin

et al. (1990) situated caregiving within the context of established roles such as wife–husband or child–parent. A study by Tran (2016, as cited in Tran, 2017) on care provision for older people in Viet Nam found that an overwhelming majority of OPs are self-reliant when it comes to their daily needs. Their spouse and co-resident children were reported as the next care providers for the OPs' daily needs. In contrast, when OPs get sick, most of those who provide care are their co-resident children, with the spouse as the next commonly cited caregiver.

The commitment to ensure the welfare of one another in such a relationship is manifested by the affective component of 'caring'; caregiving, on the other hand, is the behavioural expression of this commitment. With the emergence of health concerns often associated with ageing, the ordinary exchange of assistance between husband and wife and amongst children and parents is transformed to an 'extraordinary and unequally distributed burden' (Pearlin et al., 1990, p.583).

Like most countries in Asia, family caregiving is often assumed by women in Viet Nam (Tran, 2017). However, this family support model is being challenged with the social and economic transformation in the past decades. Economic development opened opportunities for women to participate in the labour force. The migration of women to urban areas has led to a change in gender roles where men are assigned the tasks previously confined to women and, increasingly, social institutions are taking over a lot of functions of a traditional family (Tran, 2017).

This chapter presents results of the caregiver survey to explore the extent of primary caregiving provisions as well as expectations of caregiving amongst OPs who had not identified a primary caregiver yet at the time of the survey. Characteristics of both primary and potential caregivers are explored. In addition, the survey also explores questions on caregivers' assessment of OPs' needs, their attitudes on their caregiving role, and, amongst primary caregivers, their current workload. Results were presented by considering the OPs' age and sex.

As shown in Table 12.1, a total of 3,619 respondents participated in the caregiver survey: 2,645 respondents identified themselves as primary caregivers whilst 974 people were potential caregivers.

Primary Caregivers

The concept of primary caregiving was not explicitly defined in the survey. The OP respondents were asked the question: ‘Do you have a primary caregiver at the moment?’ An affirmative response was followed up by asking permission to interview the person mentioned and getting his/her contact details. For those who said that they do not have a current primary caregiver, they were asked the question: ‘Do you have a person in mind whom you think will take care of you when you need one?’ Those who responded ‘yes’ were also asked permission to interview the person mentioned and their contact details were also noted down.

Seven in ten caregivers interviewed were primary caregivers. There were slightly more primary caregivers amongst male OPs (75%) compared with 72% of female OPs. As expected, the proportion with primary caregiver increases with the age of the OP. Eighty-two percent of OPs aged 80+ have a primary caregiver, compared to 76% of those aged 70–79 and 70% in the 60–69 group.

On the characteristics of the primary caregivers, male and female caregivers have an almost equal percentage (48% vs 52%) as shown in Table 12.2. However, there is a clear gender preference of primary caregiver as 65% of female OPs have male caregivers, and consequently majority of male OPs have female caregivers (72%).

Table 12.1. Type of Caregivers by Sex and Age of Older Persons

Type of Caregiver	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Primary	75.2	71.6	69.4	75.9	81.7	73.2
Potential	24.8	28.4	30.6	24.1	18.3	26.8
N	1,599	2,020	1,521	1,191	907	3,619

Source: Calculated by PHAD using original LSAHV data.

Almost a third of primary caregivers belong to the age group 60–69 (28%), followed by those aged 30–39 (22%). A bigger proportion of male OPs have older primary caregivers: 38% in the age group 60–69. In contrast, the primary caregivers of female OPs are aged 30–39 and 40–49 (47%). This is validated by the mean age of caregivers: amongst male OPs, the average age of caregiver is 56 whilst amongst female OPs, 50 years old.

Majority of primary caregivers are married (83%) and this number is consistent between the sexes and across the age groups of OPs. About two in three caregivers reached elementary to high school education. Sixty-seven percent are currently working whilst 29% have stopped working completely.

Less than 2% of primary caregivers received training in caregiving, slightly higher than those taking care of female OPs; the proportion with caregiving training also increases with the age of OPs.

**Table 12.2. Characteristics of Primary Caregivers
by Sex and Age of Older Persons**

Characteristics	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Age						
Below 20	0.1	0.0	0.0	0.0	0.2	0.0
20-29	4.2	6.0	7.3	2.2	3.1	5.2
30-39	16.6	25.7	25.5	22.5	9.6	21.5
40-49	10.3	21.9	9.4	22.7	27.7	16.5
50-59	17.2	15.0	12.0	11.6	32.3	16.0
60-69	37.9	18.8	40.8	12.4	11.4	27.6
70-79	10.7	9.9	4.7	25.2	6.0	10.2
80+	3.1	2.8	0.2	3.4	9.7	2.9
Mean age	55.63	49.80	50.74	53.20	53.94	52.43
N	1,194	1,451	1,051	860	734	2,645
Sex						
Male	28.0	64.4	48.1	51.0	41.9	47.6
Female	72.0	35.6	51.9	49.0	58.1	52.4
N	1,182	1,438	1,043	855	722	2,620

Characteristics	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Marital status						
Never married	7.0	14.3	11.3	9.3	12.1	10.9
Currently married	87.0	79.3	83.1	84.7	79.9	82.9
Living in	4.2	1.8	3.9	2.2	1.3	2.9
Separated/Divorced/Annulled	1.2	2.7	1.4	2.5	3.1	2.0
Widowed	0.5	1.9	0.3	1.3	3.6	1.2
N	1,190	1,451	1,050	860	731	2,641
Education						
No schooling/preschool	24.8	18.1	19.2	24.9	22.1	21.2
Elementary-High school	64.2	65.5	66.3	60.8	66.4	64.9
Vocational Education	4.6	4.1	4.8	3.6	3.7	4.3
College+	6.3	12.3	9.7	10.7	7.8	9.6
N	1,191	1,448	1,050	858	731	2,639
Work status						
Working	59.2	73.5	68.1	64.3	66.9	66.9
Stopped working completely	35.6	23.0	27.1	32.3	28.9	28.8
Never worked	5.2	3.6	4.8	3.4	4.2	4.3
N	1,190	1,450	1,048	860	732	2,640
% with caregiver training	1.1	2.3	1.6	1.7	2.1	1.7
N	1,187	1,448	1,046	857	732	2,635

Source: Calculated by PHAD using original LSAHV data.

An overwhelming majority of caregivers are the children (44%) or spouse (43%) of the OPs (Table 12.3). Sixty-three percent of caregivers are the wives of the male OPs, whilst sons/daughters comprise the bulk of primary caregivers of the female OPs. In addition to the apparent involvement of family members in providing care for the OPs, 9 in 10 of caregivers live with the OPs. A slightly higher percentage (94%) of primary caregivers who take care of male OPs live with the OPs, compared to female OPs (89%).

Table 12.3. Relationship and Living Arrangement of Primary Caregivers to/with Older Persons, by Sex and Age of Older Persons

Relationship and Living Arrangement	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Relationship to older person						
Wife/Husband	62.6	26.6	55.3	39.8	15.2	43.2
Son/Daughter	31.7	55.3	37.4	49.4	57.1	44.4
Son-in-law/ Daughter-in-law	3.5	12.9	4.4	8.1	20.4	8.6
Grandson	0.7	1.9	0.4	1.0	4.6	1.4
Parents	0.7	0.7	0.9	0.4	0.5	0.7

Relationship and Living Arrangement	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Parents-in-law	0.1	0.1	0.0	0.4	0.0	0.1
Siblings	0.0	0.8	0.7	0.4	0.0	0.5
Other relative	0.2	0.5	0.4	0.3	0.4	0.4
Adopted child	0.1	0.5	0.4	0.1	0.2	0.3
Not related	0.4	0.5	0.2	0.2	1.6	0.5
<i>N</i>	1,188	1,448	1,047	858	731	2,636
Living arrangement with Older Person						
Lives with Older Person	93.6	88.6	92.1	90.3	88.5	90.9
Lives next door	4.5	7.0	4.4	6.0	9.5	5.8
Lives in same commune	1.2	2.0	1.2	2.5	1.7	1.6
Lives in same city	0.0	0.7	0.3	0.7	0.3	0.4
Lives in same province	0.2	1.3	1.4	1.4	0.0	0.8
Lives in same province	0.4	0.5	0.6	0.4	0.0	0.4
<i>N</i>	1,191	1,447	1,046	860	732	2,638

Source: Calculated by PHAD using original LSAHV data.

About two-thirds of primary caregivers considered themselves of average health whilst 2 in 10 assessed themselves as very healthy (Table 12.4). Twenty-six percent of primary caregivers of female OPs rated themselves as very healthy, 9-percentage point higher than primary caregivers of male OPs. Conversely, more primary caregivers of male OPs than those of female OPs rated their health as ‘average’ (67% vs 61%, respectively). The relatively better self-assessment of health status amongst the primary caregivers of female OPs reflects the fact that children are likely to take care of their mother in old age, whilst the wives usually assume primary caregiving responsibility to their husbands, which implies that they themselves may be facing some health concerns.

Table 12.4. Self-Assessed Health of Primary Caregivers of Older Persons by Sex and Age of Older Persons

Self-Assessed Health Status	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Current health status						
Very healthy	17.3	25.7	23.0	21.7	18.8	21.8
Healthier than average	3.4	3.6	3.6	3.8	3.6	3.6
Of average health	66.8	60.9	64.9	62.8	61.3	63.6
Somewhat unhealthy	11.3	8.4	7.5	10.6	14.9	9.8
Very unhealthy	0.8	1.4	1.1	1.2	1.2	1.1
Not sure	0.1	0.0	0.0	0.0	0.2	0.0
N	1,189	1,450	1,050	857	732	2,639

Source: Calculated by PHAD using original LSAHV data.

Aside from the caregivers' assessment of their own health, the survey also allowed caregivers to assess the OP's functional health, i.e. the ability to perform activities of daily living (ADLs). Tables 12.5 and 12.6 present the caregivers' perception of the OP's health and needs for assistance.

A quarter of caregivers reported that the OP whom they are taking care of have difficulty in performing at least one ADL (Table 12.5). The percentage is higher amongst female OPs (29%) than male OPs (21%). Furthermore, an increasing percentage of caregivers assessed that the OP they are taking care of have experienced at least one ADL difficulty as the OP gets older. At age 60–69, only 12% of OPs were assessed by their primary caregivers as having experienced difficulty in performing at least one ADL. In contrast, 56% of OPs aged 80 and above have difficulty in at least one ADL, according to the primary caregivers. Twenty-one percent of primary caregivers cited going outside or leaving the house as the most common activity the OP finds difficulty to perform. This is followed by walking around the house (14%), standing up from a bed/chair or sitting on a chair (14%), and taking a bath/shower by oneself (13%). More female OPs were assessed by the primary caregivers as having difficulty in undertaking all seven ADLs. Age is also associated with OPs' difficulty in performing ADLs. In all activities, a higher percentage of primary caregivers, who assessed that the OPs have difficulty in doing the ADLs, is observed amongst the 80 years old and older.

Table 12.5. Primary Caregivers' Perception on Older Persons' ADL Difficulty by Sex and Age of Older Persons

Assessment of Primary Caregiver of Older Persons' ADL Difficulty	SEX		AGE GROUP			TOTAL
	Male	Female	60–69	70–79	80+	
% of caregivers who assessed that older persons with difficulty performing the following activities						
Take a bath/shower by oneself	10.2	15.3	5.9	9.9	35.9	13.0
Dress	7.0	12.2	4.0	6.9	29.2	9.8
Eat	6.0	8.0	2.5	5.3	21.9	7.1
Stand up from a bed/chair, sit on a chair	10.2	16.8	5.5	12.6	37.3	13.8
Walk around the house	10.4	17.7	5.6	14.3	37.6	14.3
Go outside (leave the house)	17.0	24.5	9.3	22.3	51.1	21.1
Use the toilet	7.1	12.3	4.3	8.0	27.2	9.9
% of caregivers who assessed that older persons with at least one ADL difficulty	20.5	28.6	12.5	26.0	56.3	24.8
N	1,191	1,451	1,050	860	732	2,642

Source: Calculated by PHAD using original LSAHV data.

Table 12.6. Primary Caregivers' Perception of the Need for Assistance of Older Persons with ADL Difficulty by Sex and Age of Older Persons

Perception of Primary Caregivers of Older Person's Need for Assistance	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
% of caregivers who assessed that older persons with difficulty need assistance performing the following activities						
Take a bath/shower by oneself	72.3	84.5	67.3	73.4	88.0	80.0
N	149	230	56	96	227	379
Dress up	86.8	90.0	82.3	89.8	91.1	88.9
N	116	188	43	72	189	304
Eat	87.0	82.5	81.5	82.7	85.5	84.2
N	95	125	32	47	141	220
Stand up from a bed/chair, sit on a chair	75.3	84.5	80.5	73.7	84.9	81.3
N	146	270	60	114	242	416
Walk around the house	73.4	79.8	78.8	69.9	81.0	77.7
N	155	278	60	123	250	433
Go outside (leave the house)	88.3	87.5	88.1	79.6	92.3	87.8
N	233	407	90	187	363	640
Use the toilet	94.3	87.3	80.6	88.0	94.1	89.6
N	110	195	41	74	190	305
% of caregivers who assessed that older persons with at least one ADL difficulty need assistance						
N	266	465	115	217	399	731

ADL = activities of daily living,

Source: Calculated by PHAD using original LSAHV data.

In addition to assessing the OP's ability to do ADLs without difficulty, the primary caregivers were also asked their perception of the need for assistance of OPs who are having difficulty in ADLs. Of the 2,642 primary caregivers interviewed, 731 reported that the OPs they are taking care of have difficulty in at least one ADL. Table 12.6 presents the results on caregivers' perception on the need for assistance of OPs with difficulty in performing at least one ADL.

Overall, 83% of primary caregivers think that the OPs who have difficulty in doing at least one ADL need assistance. Between male and female OPs, more primary caregivers perceived the females as needing assistance than the males. In the same manner, 92% of them viewed the OPs aged 80 and over and with difficulty in at least one ADL as needing assistance.

Table 12.6 shows that majority of primary caregivers perceived the OPs with difficulty in at least one ADL as needing assistance in all seven ADLs. More female than male OPs who were perceived to have difficulty in at least one ADL were assessed by their primary caregivers to be in need of assistance in four of the seven ADLs: taking a bath/shower by oneself, dressing, standing up from a bed/chair and sitting on a chair, and walking around the house. Meanwhile, more male than female OPs with difficulty in at least one ADL were reported by their primary caregiver as needing assistance in eating, going outside (leaving the house), and in using the toilet.

As can be seen in Table 12.7, daily assistance to OPs in doing household tasks make up the bulk of the primary caregiver’s work. Half of primary caregivers reported that they assist the OPs in doing household tasks every day, more amongst those who take care of male OPs than amongst caregivers of female OPs. This function also increases with age, as 7 in 10 primary caregivers assist the OPs aged 80 and above in household tasks. In contrast, only 4 in 10 primary caregivers help in household tasks to those aged 60–69.

Table 12.7. Assistance Given to Older Persons for Various Activities of Daily Living by Sex and Age of Older Persons

Assistance	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Percent who assist older person with the following activities of daily life:						
Household tasks	53.9	45.7	42.3	47.8	70.9	49.5
<i>N</i>	1,191	1,451	1,050	860	732	2,642
Personal care	14.0	20.8	10.6	16.0	38.6	17.6
<i>N</i>	1,187	1,445	1,049	856	727	2,632
Moving around the house, going on outings, visiting family or friends, etc.	16.8	23.2	11.8	21.4	41.6	20.3
<i>N</i>	1,190	1,450	1,049	859	732	2,640
Mean number of hours per week spent caring for OP						
Household tasks	23.53	20.45	18.70	23.86	23.36	22.01
<i>N</i>	355	348	226	207	270	703
Personal care	15.50	18.49	15.95	15.31	18.83	17.34
<i>N</i>	84	135	41	59	119	219
Moving around the house, going on outings, visiting family or friends, etc.	8.65	12.39	10.72	9.30	13.95	11.85
<i>N</i>	79	164	46	78	119	243

Source: Calculated by PHAD using original LSAHV data.

Assistance in personal care is higher amongst caregivers of female OPs than male OPs (21% vs 14%). Twenty-three percent of primary caregivers help female OPs move around the house, go on outing, and visit family or friends. This is 5-percentage point higher amongst caregivers of male OPs. In all activities, the percentage of primary caregivers helping OPs increases with age, implying the effect of age on OPs' need for assistance.

More time is allotted by primary caregivers in assisting OPs with household tasks than with personal care and with moving around and going out. In a week, the average time spent doing household tasks is 22 hours. Between male and female OPs, primary caregivers spend more time assisting male OPs in household tasks than female OPs (23.5 hours vs 20.4 hours). The pattern is reversed, however, when it comes to assistance in doing personal care: on average, primary caregivers spent 18.5 hours assisting female OPs and only 15.5 hours with male OPs. Moreover, time spent assisting OPs move around the house is longer amongst female OPs than male OPs (12.4 hours vs 8.6 hrs).

When asked about the degree of difficulty in caring for the OP, almost 27% rated the task as 'easy' (Table 12.8). On a scale of 1 to 10, with 1 easy and 10 difficult, the mean score overall was 3.9, implying that primary caregivers of OPs generally consider the task relatively easy. Only 4% rated the task difficult. There is little variation when the gender of the OP is considered. On the average, primary caregivers rated caring for male OPs 3.9, compared to 4.0 amongst those caring for female OPs. As expected, the mean level of difficulty is highest amongst OPs aged 80 and above.

The median number of months that the primary caregivers spent taking care of OPs is 46.4. Primary caregivers of OPs aged 80+ spent the longest time in providing care, 58.4 months.

An overwhelming majority of primary caregivers said they volunteered for the job (87%), whilst 10% became the primary caregiver because they were the only one available.

**Table 12.8. Difficulty in Caring for Older Persons
by Sex and Age of Older Persons**

Difficulty (1=easy, 10=difficult)	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Difficulty in caring for Older Person						
1	28.7	25.2	32.2	23.5	16.4	26.8
2	11.5	11.9	13.9	10.7	7.1	11.7
3	11.6	9.5	10.3	11.0	10.4	10.5
4	7.7	8.4	6.0	7.5	14.6	8.1
5	14.0	14.9	13.0	15.6	17.1	14.5
6	5.8	9.6	6.3	9.7	9.8	7.8
7	7.5	8.0	7.1	9.0	7.8	7.8
8	6.4	7.3	6.2	7.2	8.3	6.9
9	2.9	1.8	2.3	2.0	2.9	2.3
10	3.9	3.4	2.8	3.9	5.6	3.6
Mean level of difficulty in caring of Older Person	3.91	4.06	3.61	4.21	4.61	3.99
N	1,189	1,447	1,047	859	730	2,636
Median duration (in months) spent taking care of Older Person	48.24	44.96	36.93	44.73	58.37	46.39
N	518	668	424	375	387	1,186
Reason for being the primary caregiver						
I volunteered	90.4	83.3	88.6	85.6	82.2	86.6
Older Person requested me	0.6	1.1	1.0	0.9	0.5	0.9
Other family members requested me	0.4	1.0	0.2	0.5	2.3	0.7
I am the only one available	7.9	11.9	8.7	11.4	11.9	10.0
Others (Older Person took care of me as a child, lives with Older Person, etc.)	0.9	2.7	1.5	1.6	3.1	1.8
N	1,191	1,451	1,050	860	732	2,642

Source: Calculated by PHAD using original LSAHV data.

Primary caregivers were asked whether they agree to a series of statements describing their various situations as primary caregiver (Table 12.9). More than half of them agreed to the statement that they gain personal satisfaction in performing their care work. More than a quarter agreed that they have support from family, friends, neighbours, and paid help in performing their care tasks.

Eighteen percent agreed that they have problems with the OPs who are demanding, have difficulty in communicating, or behaving differently. Agreement to the statement was associated with the increasing age of the OPs. For example, 20% of primary caregivers of OPs aged 80 and above agreed that they have problems with the OP, a little higher than caregivers who are taking care of OPs aged 60–69 (17%) and 70–79 (19%).

**Table 12.9. Situation as a Primary Caregiver
by Sex and Age of Older Persons**

Situation as a Caregiver	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
% who agree or strongly agree with the following statements:						
I gainewwd personal satisfaction from performing my care tasks	58.5	57.1	57.6	59.1	56.4	57.7
I have problems with Older Person (e.g., demanding, communication problems, behaves differently)	18.7	17.6	16.9	18.9	20.2	18.1
I have problems with my own mental health	11.7	8.6	9.3	11.0	10.8	10.0
I have problems with my own physical health	11.6	9.0	8.7	11.1	13.2	10.2
I have problems combining my daily activities	17.7	15.9	13.4	20.3	21.4	16.8
I have financial problems concerning my care tasks for Older Person	14.8	15.0	14.3	14.9	16.7	14.9
I have support from family/friends/neighbors/ paid help in performing my care tasks for Older Person	24.7	26.5	25.4	23.5	29.3	25.7
N	1,194	1,451	1,051	860	734	2,645

Source: Calculated by PHAD using original LSAHV data.

Potential Caregivers

The potential caregivers comprised 27% of all respondents in the caregiver survey as shown in Table 12.1. The mean age of potential caregivers is 48 years old (as shown in table 12.10). Potential caregivers of male OPs are older than those of female OPs (50.4 years vs 46.3 years). More than half of potential caregivers are males (56%). Six in ten female OPs have male potential caregivers, whilst more than half of male OPs mentioned a female potential caregiver. Like primary caregivers, majority of potential caregivers are currently married (77%) and with at least an elementary/high school education (72%). Three in four are currently working and less than 1% had training in caregiving.

**Table 12.10. Characteristics of Potential Caregivers
by Sex and Age of Older Persons**

Characteristics	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Age						
Below 20	0.4	0.3	0.5	0.0	0.0	0.3
20-29	7.6	12.9	13.8	6.5	1.7	10.7
30-39	28.9	36.4	37.1	31.1	16.7	33.3
40-49	15.8	17.4	10.7	23.4	36.8	16.8
50-59	12.2	10.1	7.7	12.9	24.6	10.9
60-69	26.8	15.4	26.3	10.8	4.2	20.1
70-79	6.6	6.3	3.8	14.0	7.1	6.4
80+	1.8	1.3	0.2	1.3	8.9	1.5
Mean age	50.43	46.26	46.30	48.21	52.25	47.99
N	402	566	469	329	170	968
Sex						
Male	48.6	60.9	58.8	46.1	56.9	55.7
Female	51.4	39.1	41.2	53.9	43.1	44.3
N	399	556	460	325	170	955
Marital status						
Never married	9.6	18.8	18.2	9.0	8.7	15.0
Currently married	80.6	74.0	74.4	81.8	79.9	76.7
Living in	6.9	3.9	5.6	3.9	5.1	5.2
Separated/Divorced/Annulled	2.2	2.3	1.4	4.1	3.1	2.2
Widowed	0.8	1.1	0.4	1.2	3.2	0.9
N	404	569	470	331	172	973
Education						
No schooling/Preschool	10.9	7.7	6.7	13.6	13.2	9.0
Elementary/High school	71.0	72.6	73.1	69.8	69.6	71.9
Vocational Education	3.9	3.5	3.1	4.3	5.5	3.7
College+	14.3	16.3	17.2	12.3	11.7	15.4
N	404	569	470	331	172	973
% currently working	71.6	77.1	75.7	72.0	75.4	74.8
N	404	569	470	331	172	973
% with caregiver training	0.8	0.7	0.6	1.0	0.7	0.7
N	403	568	470	330	171	971

Source: Calculated by PHAD using original LSAHV data.

The expectation on the responsibility of old-age care is mainly assigned to family members (Table 12.11). Offspring dominates the potential caregivers (56%) whilst the spouse of the OPs comprise 30%. Interestingly, the higher percentage of potential caregivers are spouses of male OPs (41% vs 21% amongst female OPs). Proximity to OPs is necessary in caregiving tasks especially in old age. Amongst potential caregivers, majority live with the OPs (78%) whilst 12% live next door and another 4% live in the same commune.

Table 12.11. Relationship of Potential Caregiver to the Older Person by Sex and Age of Older Persons

Indicators	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Relationship to Older Person						
Wife/Husband	40.8	20.8	33.4	25.5	13.0	29.1
Son/Daughter	52.5	59.1	55.2	55.9	63.0	56.3
Son-in-law/ Daughter-in-law	4.0	12.7	6.6	11.5	17.7	9.1
Grandson	1.7	2.4	1.0	4.4	4.1	2.1
Parents	0.6	1.2	0.9	1.7	0.0	0.9
Parents-in-law	0.0	0.0	0.0	0.0	0.0	0.0
Siblings	0.1	1.7	1.2	0.5	1.3	1.0
Other relative	0.0	1.4	1.1	0.4	0.0	0.8
Adopted child	0.4	0.4	0.5	0.1	0.6	0.4
Not related	0.0	0.2	0.1	0.1	0.3	0.1
N	404	569	470	331	172	973
Living arrangement with Older Person						
Lives with Older Person	81.3	74.9	80.0	73.6	71.9	77.6
Lives next door	13.4	10.1	9.5	11.3	22.4	11.5
Lives in same commune	1.8	5.9	2.6	8.7	4.6	4.2
Lives in same city/municipality	2.0	2.4	2.6	2.3	0.2	2.2
Lives in same province	0.0	4.6	3.9	0.6	0.0	2.7
Lives in a different province	1.5	2.0	1.4	3.5	0.9	1.8
N	404	567	469	331	171	971

Source: Calculated by PHAD using original LSAHV data.

As shown in Table 12.12, majority of potential caregivers rated their health as 'average' (64%). When the age of the OP is considered, more potential caregivers identified by OPs in the younger age group (60–69) have 'very healthy' self-assessed health status compared to caregivers of the older age group. In the same manner, a slightly higher percentage of potential caregivers of OPs aged 80 and above have 'average' health. Only 6% of potential caregivers assessed their health status as 'somewhat unhealthy', and this is higher amongst those identified by male OPs (9% vs 5%).

Table 12.12. Self-Assessed Health of Potential Caregivers of Older Persons and their Willingness to Assume the Caregiver Responsibility by Sex and Age of Older Persons

Self-Assessed Health Status	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Current health status						
Very healthy	23.7	20.3	25.0	17.2	12.7	21.7
Healthier than average	4.2	8.5	6.1	7.4	8.7	6.7
Of average health	62.1	66.2	62.3	67.5	70.9	64.5
Somewhat unhealthy	8.9	4.6	6.0	7.9	5.5	6.4
Very unhealthy	1.0	0.3	0.6	0.0	1.5	0.6
Not sure	0.0	0.1	0.0	0.0	0.0	0.1
N	404	568	469	331	172	972
% willing to assume responsibility as caregiver	97.4	96.8	97.6	97.7	92.4	97.0
N	404	567	469	331	171	971

Source: Calculated by PHAD using original LSAHV data.

Overwhelmingly, potential caregivers reported that they are willing to assume the responsibility as caregiver of OPs.

Summary, Conclusions, and Recommendations

Whilst informal family caregiving of OPs is the norm in Viet Nam, there is no baseline study yet to understand the characteristics and situations of family caregivers. In light of changing family structure and dynamics brought about by modernisation, the results of the study provided evidence on the persistent and prevalent norm of strong family support in old age. Children, particularly co-resident children, are the dominant primary and potential care providers, an indication that the concept of filial piety remains pervasive.

A striking finding though is the high report of primary caregiving (73%), although an important caveat to this result is that the concept of primary caregiving was not defined in the survey. Nonetheless, the result can indicate how older Vietnamese perceive primary caregiving, that is, as mostly associated with assistance in the performance of daily tasks. Thus, the spouses are predominantly identified as the primary caregivers of OPs, followed by their children. Proximity to OPs is also an important factor in the provision of caregiving, either primary or potential. An overwhelming majority of both types of caregivers live with the OPs or at least they live next door or in the same commune. These results support the assumption that,

for most OPs, primary caregiving is embedded in family relationships. Moreover, most of the assistance provided by primary caregivers involves household tasks.

Even caregivers' assessment of the level of difficulty in the performance of their primary caregiving duties indicates that most do not consider the role as tasks or burden but as part of their duties either as spouse or as children. To what extent this assessment will change with physical and health impairment is an aspect that should be explored in further studies.

References

- Dam, V.C., T.M.O. Tran, H.L. Duong, A.T. Khuong, and T.T. Nguyen (2009), *An Assessment of Healthcare for the Elderly in Vietnam*, Ha Noi, Viet Nam: Health Strategy and Policy Institute. <http://en.hspi.org.vn/vclen/An-assessment-of-healthcare-for-the-elderly-in-Vietnam-t15971-1051.html> (accessed 21 November 2019).
- Giang, L. and W. Pfau (2007), 'The Elderly Population in Vietnam during Economic Transformation: An Overview', *MPRA Paper*, Munich, Germany: University Library of Munich.
- National Assembly of the Socialist Republic of Vietnam (2009), *The Law on the Elderly*. Law No. 39/2009/QH12. Ha Noi.
- Pearlin, L.I., J.T. Mullan, S.J. Semple, and M.M. Skaff (1990), 'Caregiving and the Stress Process: An Overview of Concepts and Their Measures', *The Gerontologist*, 30(5), pp.583–94. doi:10.1093/geront/30.5.583 (accessed 21 November 2019)
- Tran, T.M.T. (2017), *Sharing Response on the Ground – Ageing Society and the Surrounding Challenges in Asia: Elderly Care in Ageing Society of Vietnam*. Paper presented at the *Toyota Foundation Public Symposium* on 28 February 2017, Seoul, Republic of Korea.
- Tran, T.M.T. (2016), 'Living Arrangement of the Elder and Determinants', *Journal of Family and Gender Studies*, 5, pp.25–41, [http://ifgs.vass.gov.vn/Uploads/files/Tran%20Thi%20Minh%20Thi\(1\).pdf](http://ifgs.vass.gov.vn/Uploads/files/Tran%20Thi%20Minh%20Thi(1).pdf) (accessed 21 November 2019).

- Truong, Q.T. (2015), *The Quality of Life and Caregiving Burden among Caregivers of People with Dementia in Hanoi, Bac Ninh and Hai Phong, Vietnam* (Thesis). Brisbane, Australia: Queensland University of Technology. <http://eprints.qut.edu.au/82287/> (accessed 21 November 2019)
- Yao, X. (2000), *An Introduction to Confucianism*. New York, NY: Cambridge University Press.

Children of Older Persons

Mai Thi Tran, Linh Thuy Dang, and Nguyen Cong Vu

When people get older, they lose working capacity and cognitive function. They also suffer from social isolation and loneliness, which result from inadequate social and family support and are associated with a higher risk of disability, illness, and mortality (Lubben and Gironde, 2003). The parent–child dyad can help older persons (OPs) overcome those problems by creating a pool of possible caregivers for OPs at the later stages of life (Ingersoll-Dayton and Antonucci, 1988). The relationship between parent and child may be pivotal in ensuring positive health outcomes amongst OPs. As discussed in chapter 11, the mutual relationship between old parents and their children takes an important role in successful ageing (Cheng et al., 2015).

Furthermore, the association between intergenerational relationships and cognitive decline of OPs is complex. Several studies had demonstrated that most OPs possess considerable ‘reserve capacity’ (Baltes and Baltes, 1990). This reserve capacity with sufficient guidance and support from family allows OPs to continue functioning later in life like they did in their earlier years. OPs with adequate family support have higher scores of cognitive functioning as well (Pillemer and Holtzer, 2016; Zhu et al., 2012). Hence, the loss or depletion of this support (e.g. through widowhood or the migration of children) corresponds to a significant impairment in healthy cognitive functioning in advanced ages. This fact underscores the significance of examining the relationship between parent and child across several dimensions, namely, living arrangements, relationships, exchanges of support, and attitudes and beliefs.

Limitations on research on intergenerational relationships still exist. Firstly, not many studies have assessed intergenerational relations from the perspective of both generations. Secondly, no systematic review has been done on the different reports of other dimensions of intergenerational relationships (Shapiro et al., 2004).

Fortunately, the multifactor design of the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) provides a nationally representative sample that can be used to examine both the relationship of Vietnamese older parents and their adult children and reports the multiple dimensions of intergenerational solidarity. In this regard, the LSAHV hopes to contribute to the understanding of parent–child dyads in Viet Nam substantially.

This chapter presents LSAHV findings on adult children by the OPs’ sex and age. It aims to describe the parent–child relationship from the adult children’s perspective. This chapter also helps gain a deeper understanding of the nature of the parent–child relationship, support provision, and expectations regarding filial piety. The baseline survey interviewed 2,898 children of the OP respondents. Children who are caregivers of the OP respondents were interviewed using the caregiver questionnaire and not the adult child questionnaire. Similar to the caregivers, adult children are defined as the OPs’ children who are 18 years old and above.

Profile of Older Persons’ Adult Children

Table 13.1 shows the profile of the interviewed adult children of OP respondents. Males slightly outnumber females (56% vs 44%). A higher proportion of male OPs have female adult children (51.5%), whereas more female OPs have male adult children (61.6%).

Table 13.1. Characteristics of Children by Sex and Age of Older Persons

Characteristics of Children	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Age						
Below 20	0.3	0.5	0.3	0.9	0.1	0.4
20-29	13.1	10.4	18.8	4.5	2.4	11.3
30-39	49.3	41.5	60.1	42.3	10.7	44.3
40-49	24.2	29.6	20.3	34.9	35.9	27.6
50-59	10.3	14.1	0.6	16.6	35.8	12.7
60-69	2.1	3.5	0.0	0.9	12.2	3.0
70-79	0.8	0.5	0.0	0.0	2.9	0.6
Mean age	40.1	42.3	34.8	41.7	49.3	41.6
Sex						
Male	48.5	61.6	59.0	54.4	50.4	56.2
Female	51.5	38.4	41.0	45.6	49.6	43.8

Characteristics of Children	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Marital status						
Never married	9.6	17.9	16.7	10.4	13.2	14.4
Currently married	85.0	85.0	78.5	83.6	78.4	79.8
Live-in	3.0	3.0	3.0	1.3	1.5	2.3
Separated/Divorced/Annulled	1.8	2.7	1.3	3.4	3.7	2.3
Widowed	0.5	1.6	0.4	1.3	3.3	1.1
Education						
No schooling/Preschool	49.4	55.3	50.5	55.1	56.6	52.8
Elementary/High School	39.1	30.5	33.3	34.5	35.5	34.0
Vocational Education	6.7	11.6	10.8	8.4	7.5	9.6
College+	4.9	2.6	5.4	2.0	0.4	3.6
% currently working	71.2	76.6	77.5	70.2	70.9	74.4
N	1,165	1,733	1,158	975	765	2,898

Source: Calculated by PHAD using original LSAHV data.

The findings showed that most adult children of OPs are in their 30s (44.3%) and 40s (26.7%), with a mean age of 41.6 years. There is no significant gender differential in the mean age, with female OPs having older adult children relative to their male counterparts (42.3 years compared to 40.1 years). As expected, when the OP respondents become older, the mean age of their adult children increases (34.8 years for the 60–69 group and 49.3 years for the 80+ group).

A high proportion (79.8%) of OPs' children are currently married. About 14% of their adult children are never married. Only a small proportion of their adult children are co-habiting (2.3%), separated/divorced (2.3%), and widowed (1.1%). Female OPs are more likely than male OPs to have children who are never married (17.9% vs 9.6%).

Overall, OPs' adult children have low educational profiles. More than half of the children (52.8%) have no schooling or reached only the elementary level, and 34% of them reported having secondary and high school education. There is no clear pattern of low educational profiles by age. Children of the youngest OP cohort have a higher education attainment than children of the oldest OP cohort. For instance, the percentage of adult children having college education is 5.4% for the 60–69 OP cohort and only 0.4% for the 80+ OP group. Because the mean age of adult children is 41.6, 74.4% of them are currently working. More female OPs than male OPs have working children (76.6% compared to 71.2%).

Living Arrangement

Living arrangements directly affect the relationship of children and OPs, thus it is important to understand intergenerational living arrangements. Furthermore, a growing body of literature on the subject emphasises the changing directions of dependence over the life cycle (Choi, 2003; Crimmins and Ingegneri, 1990; Wiemers et al., 2016).

Table 13.2 and Figure 13.1 show the distribution of living arrangements of adult children by the OPs' sex and age group. Similar to the result shown in Table 3.4 in chapter 3, OP respondents are most likely to be currently living with an adult child. Co-residence with the OP (73%) is the most common living arrangement of the adult children, slightly more for males than for females (74.9% vs 71.7%). Especially, the number of the oldest OP co-habiting with children is the largest (77.3%). The next most common living arrangement of the children of OP is next door (12.8%). This type of living arrangement becomes more common nowadays, especially in urban areas. The distance is not only close enough for children to take care of the OP but also gives the adult children the freedom to raise their own modern nuclear family. Only a small percentage of adult children live in the same village, city, and province with the OP (less than 5% in total). As the age of the OP increases, so do the proportions of children who live in the same house and next door.

**Table 13.2. Relationship to Older Persons
by Sex and Age of Older Persons**

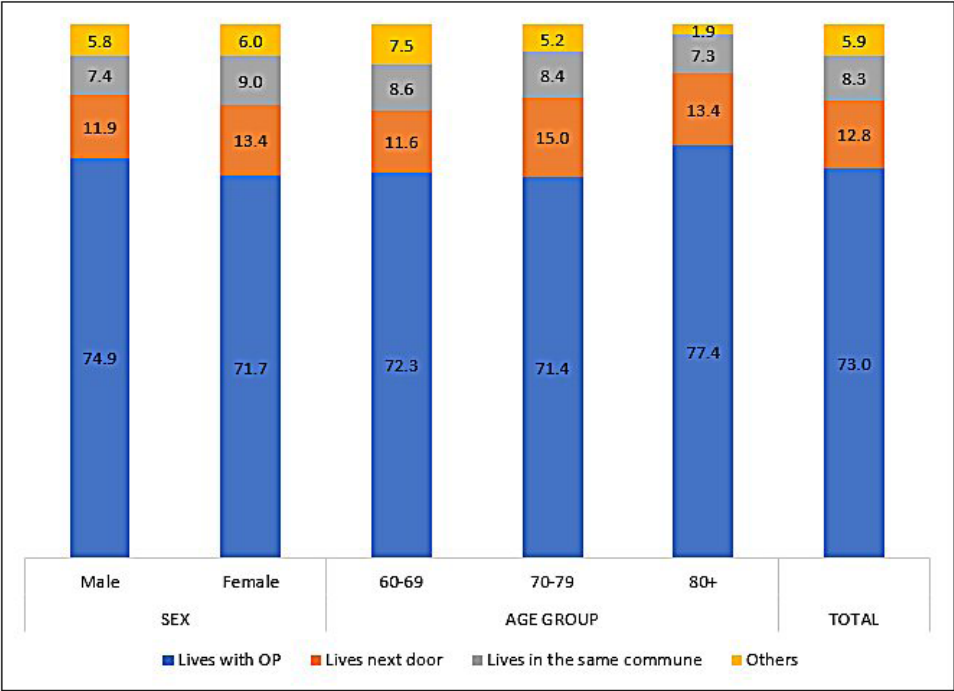
Relationship of Children to Older Person	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Living arrangement						
Lives with Older Person	74.9	71.7	72.3	71.4	77.3	73.0
Lives next door	11.9	13.4	11.6	15.0	13.4	12.8
Lives in same commune	7.4	9.0	8.6	8.4	7.3	8.3
Lives in same city/municipality	2.5	1.5	2.1	2.4	0.5	1.9
Lives in same province	0.5	2.8	2.6	1.1	0.6	1.8
Lives in a different province	2.9	1.7	2.8	1.8	0.8	2.2
N	1,165	1,733	1,158	975	765	2,898
Mean number of months child lived separately from Older Person	79.40	95.91	69.40	102.66	102.42	89.36
N	263	400	264	246	153	663

Relationship of Children to Older Person	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Frequency of visits in the past 12 months (visited Older Person)						
Not at all	2.4	2.6	2.8	0.8	4.8	2.5
Everyday	49.1	50.2	45.6	55.7	54.5	49.8
Every few days	19.8	20.4	19.7	18.9	24.2	20.2
Every week	11.6	11.2	12.1	12.4	6.6	11.4
Every month	5.2	7.5	7.3	6.1	5.2	6.6
Every few months	5.9	5.4	7.1	4.3	2.4	5.6
Once a year	3.4	0.9	2.8	0.8	0.0	1.8
On special occasion	2.3	1.2	2.3	0.2	1.8	1.6
As the need arises	0.4	0.5	0.3	0.7	0.6	0.5
Frequency of visits in the past 12 months (visited by Older Person)						
Not at all	14.4	10.8	10.0	11.7	21.3	12.2
Everyday	40.4	39.3	37.1	46.8	36.7	39.7
Every few days	14.7	17.0	17.4	13.8	15.7	16.1
Every week	7.9	11.9	13.5	6.6	5.6	10.4
Every month	5.6	6.3	5.6	7.7	4.4	6.0
Every few months	5.7	6.4	6.5	5.1	6.7	6.1
Once a year	3.0	1.1	2.5	1.1	0.4	1.8
On special occasion	4.8	4.0	4.6	3.9	3.7	4.3
As the need arises	3.6	3.2	2.8	3.5	5.7	3.4
Frequency of talking/chatting with Older Person (through phone, FB, etc.) in the past month						
Not at all	24.9	25.4	19.8	30.2	37.2	25.2
Everyday	32.9	30.8	33.9	31.8	22.5	31.7
Every few days	21.8	25.4	26.2	23.2	16.2	23.9
Every week	12.2	10.2	11.7	8.5	13.3	11.0
Once	0.5	0.4	0.8	0.0	0.0	0.4
As the need arises	7.7	7.8	7.7	6.4	10.8	7.8
N	282	434	276	268	172	716
Type of relationship with Older Person growing up (from birth to age 15)						
Get along well all the time	73.1	74.3	74.3	71.1	76.1	73.8
Get along well most of the time	18.0	17.7	16.6	20.9	17.2	17.9
Get along well sometimes	6.9	5.6	6.8	5.3	5.2	6.1
We don't get along well at all	2.0	2.4	2.2	2.7	1.6	2.2
N	1,163	1,731	1,157	973	764	2,894
Type of relationship with Older Person at present						
Get along well all the time	59.9	62.4	62.2	59.3	61.9	61.4
Get along well most of the time	28.0	27.4	26.7	30.5	26.2	27.6
Get along well sometimes	11.1	9.5	10.1	9.4	11.1	10.1
We don't get along well at all	1.1	0.7	1.0	0.8	0.7	0.9
N	1,163	1,731	1,157	973	764	2,894

Source: Calculated by PHAD using original LSAHV data.

Of the 2,898 adult children sample, 663 people lived separately from the OPs for an average of 89 months (about 7.4 years). Females lived away from their parents longer at an average of 96 months compared to 79 months for their male counterparts. The average duration increases with the OPs’ age (69 months for the 60–69 OP group and 102 months for older groups).

Figure 13.1. Living Arrangement with Older Persons, by Sex and Age of Older Persons (%)



Source: Calculated by PHAD using original LSAHV data.

Relationship to Older Persons

The relationship between adult children and their parents is one of the most important relationships of adult children (Shapiro, 2004). The definition of child–parent relationship may vary as the relationship intersects in multiple dimensions. For instance, in the context of the ageing process, the relationship is mostly social in nature.

Table 13.2 summarises the dynamics of the relationship between adult children and their ageing parents. Results indicated that about 50% of non-co-resident adult children visited their parents daily in the past 12 months, with no significant difference in the elderly parent's sex. Children with parents in their 70s have the highest percentage of visiting their parents daily. About one in five children visited their ageing parents at least once every few days.

The LSAHV also asked the frequency of visits made by the OPs to their children; the findings showed that the visits are reciprocated. About 40% and 16% of the adult children were visited daily and every few days, respectively, by their ageing parents in the past 12 months. As expected, children reported a decreasing number of visits by OPs of advancing age. More female OPs visited their children every few days (17%) compared to male OPs (14.7%). About 12.2% of children were never visited by their ageing parents in the year before the survey. This percentage increased with age, such as 10% for the 60–69 group and 21.3% for the 80+ group.

We also asked the adult children about their communication with their parents by phone, social networking sites like Facebook, and other social media platforms. About 25% of adult children had not talked or chatted with their parents on the phone or on social media in the past month. About 32% of children communicated with their parents daily, with slightly more to male OPs (32.9%) compared to female OPs (30.8%). The levels of daily communication with the OPs also decline as the parents' age advances. Adult children communicated with their parents every few days (23.9%) and every week (11%). Generally, the proportion of children who communicate with their parents declines, independent of the frequency, as the OPs age.

Adult child respondents were also asked about the type of relationship they had with their parents whilst growing up (from birth to age 15) and at present. Adult children reported similar relationships with their ageing parents whilst growing up and at present. Generally, they had very good relationships with their parents whilst growing up; only about 10% reported not-so-good or poor relationships. There are no gender and age differences in the relationship that the children had whilst they were growing up. A high proportion (73.8%) of the adult child respondents reported favourable relationships with their ageing parents from birth to age 15. Children of OPs aged 80+ reported the highest level of good relations with their parents whilst they were

growing up (76.1%), compared to 71.1% for parents in their 70s and 74.3% for parents in their 60s.

Similar to the quality of the relationship whilst growing up, adult child respondents seem to have a more favourable relationship with female OPs. This is not surprising as females mainly stay home and take care of the household and their young children. There are no apparent gender and age differences in the reported quality of the current relationship between the adult children and their parents. However, the present relationships of children with their parents aged 70–79 were reported to be slightly less congenial than those with parents in the other age groups. For example, 59.3% of the children of OPs aged 70–79 said they get along well with their parents all the time, compared to 62.2% and 61.9% for those whose parents are aged 60–69 and 80+, respectively.

Support Provided by Children

The investigation of older parent–adult child relationships concentrated on the equivalence and/or asymmetry in their exchanges. These exchanges require the transfer of time, labour, and financial assets across generations (Silverstein et al., 2002). In Viet Nam, adult children are expected to provide support and assistance to their ageing parents. However, certain circumstances allow older parents to continue extending help to their children in some ways. The LSAHV explored both the support provided by adult children to their parents and the support provided by the OPs to their children.

Table 13.3 summarises the financial and other types of support provided by adult children to the OP respondents. Results show that more than half of adult children financially supported their parents in the month before the interview. Female OPs received more financial support from their children compared to their male counterparts (57.4% vs 46.6%, respectively). Amongst the children who provided financial support to their ageing parents in the month before the survey, 66.2% gave such support every month, with a slightly higher percentage for female OPs than male OPs (68.7% compared to 61.8%). Regular monthly support received by OPs was higher amongst the 70s cohort relative to the other OP cohorts. Children who financially supported their parents every month give a median monthly amount of one million Vietnamese dong (D) (about US\$43); the same amount of money were given to OPs regardless of sex and age.

**Table 13.3. Support Given to Older Persons
by Sex and Age of Older Persons**

Support from Children	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
% who provided financial support to Older Person in the past month	46.6	57.4	51.3	51.8	59.5	52.9
N	1,161	1,732	1,155	974	764	2,893
% who provide financial support to Older Person every month	61.8	68.7	65.5	68.0	65.8	66.2
N	595	1,027	623	542	457	1,622
Median monthly financial support given to Older Person (Vietnamese Dong)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
N	331	614	359	322	264	945
Financial support to Older Person provided by siblings						
All siblings provide	46.2	41.9	44.9	40.9	42.4	43.3
Some siblings provide	34.1	28.5	25.1	40.1	31.7	30.4
I alone provide help	17.5	25.0	25.9	15.8	22.1	22.5
I am an only child	2.3	4.6	4.1	3.2	3.8	3.8
N	371	691	404	359	299	1,062
Other forms of support provided to Older Person in the past 12 months						
None	18.2	19.2	20.3	20.0	12.6	18.8
Material support	18.6	23.3	21.9	19.6	22.4	21.4
Help in household chores	24.9	22.0	23.4	24.1	21.2	23.2
Help in transportation	2.1	3.9	3.0	2.2	5.1	3.2
Manage financial transactions	0.1	0.3	0.3	0.1	0.3	0.2
Manage business	0.3	0.1	0.2	0.1	0.2	0.2
Personal care	6.6	6.4	4.1	4.8	16.0	6.5
Emotional support	28.7	24.3	26.2	29.0	21.5	26.1
Others (spiritual support; company during visits to the doctor, etc.)	0.4	0.5	0.7	0.0	0.7	0.5
N	1,164	1,732	1,156	975	765	2,896

Source: Calculated by PHAD using original LSAHV data.

The LSAHV data revealed that children share responsibility in financially supporting their ageing parents. Adult children were asked if their siblings give financial support to their parents; 43.3% reported that all siblings do, whilst 30.4% said only some siblings do. About one in five of child respondents said they are the sole providers of financial help to their ageing parents. In addition, 3.8% of child respondents are the only child, with no siblings to share the responsibility with for their parents. More children of male OPs, compared to those of female OPs, reported that all and some siblings provide support to their parents. On the other hand, the proportion who reported other arrangements (i.e. the respondent child alone and those in the 'only child group' provide support) is higher amongst children of female OPs than those of male OPs.

Adult child respondents reported a wide range of support in other forms they gave their ageing parents in the past 12 months. These mainly include emotional support (26.1%), help in household chores (23.2%), and material help (21.4%), in descending order of importance. The level of support varies by the OP's age and sex for all the aforementioned types of support. Other less common forms of support provided include help in managing their business (0.2%) and assistance in financial management (0.2%). A relatively big proportion of adult children (18.8%) did not give any type of support in the past 12 months.

A gender pattern exists in some forms of support provided by the children of OPs. In particular, more children of female OPs (23.3%) reported giving material support compared to children of male OPs (18.6%). On the other hand, a higher proportion of children provided emotional support to their fathers (28.7%) than to their mothers (24.3%). A similar gender pattern was observed in providing help in household chores. The provision of personal care increased with the OP's age (from 4.1% for the 60–69 group to 16% for the 80+ group). Oppositely, when the age of OPs increases, the proportion of those who did not receive any other forms of support in last 12 months declines (20.3% for the 60–69 group and 12.6% for the 80+ group).

Support Provided by Older Persons

The LSAHV explored the support flows from adult children to their parents and vice versa. Adult child respondents were asked if they received financial and other forms of support from their ageing parents (Table 13.4). Generally, results revealed a mutual albeit unequal exchange of support, with more support coming from children than from parents.

Only 16.9% of adult children received financial support from their parents in the month before the interview, whereas 52.9% of OPs received financial support from their children. More male than female OPs provided financial support to their adult children (18.1% vs 16.1%, respectively). Such support decreases as the OPs age (19% for the 60–69 group and 11.9% for the 80+ group). About 35% of adult children receive financial support from their parents every month, with a higher proportion from their fathers. The median monthly financial support provided by OP respondents was VND 1 million (about US\$43), the same as the amount received by OPs from their children. The 60s and 70s groups give VND 2 million (US\$86) to their adult children monthly, which is double the amount given by the 80+ group.

**Table 13.4. Support Received from Older Persons
by Sex and Age of Older Persons**

Support from Older Person	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
% who received financial support from Older Person in the past month	18.1	16.1	19.0	16.0	11.9	16.9
N	1,162	1,729	1,156	974	761	2,891
% who received financial support from Older Person every month	40.0	30.3	37.3	28.9	32.3	34.6
N	214	273	229	150	108	487
Median monthly financial support received from Older Person (Vietnamese Dong)	1,000,000	1,000,000	2,000,000	2,000,000	1,000,000	1,000,000
N	19	16	15	9	11	35
Other forms of support received from Older Person in the past 12 months						
None	37.7	39.9	34.7	40.8	49.5	39.0
Material support	8.0	7.9	9.1	8.1	4.4	8.0
Help in household chores	15.6	16.3	17.7	15.8	11.2	16.0
Help in transportation	1.4	0.6	1.0	1.0	0.7	0.9
Manage financial transactions	0.0	0.0	0.0	0.0	0.0	0.0
Manage business	0.8	0.1	0.6	0.2	0.0	0.4
Personal care	1.5	0.9	0.6	1.5	2.4	1.1
Emotional support	34.9	34.0	36.2	32.3	31.6	34.4
Others (spiritual support, etc.)	0.0	0.4	0.2	0.3	0.3	0.3
N	1,163	1,731	1,154	975	765	2,894

Source: Calculated by PHAD using original LSAHV data.

Besides financial support, adult children also received other forms of support from OPs in the past 12 months. These included emotional support (34.4%), help in household chores (16.0%), and material support (8.0%). No apparent gender differential patterns are observed. However, the proportion of children who received these three types of support decreases dramatically as the OPs age. For example, the proportion of children who received material support decreases from 9.1% for children whose parents belong to the 60–69 group to 4.4% for those whose parents are 80+. The results reflect a decline in the OPs' capacity to support to their adult children. Because of very old age, a high proportion of OPs do not provide other forms of support to their adult children (39%). This proportion is much higher than the proportion of adult children who do not provide support to their parents (18.8%).

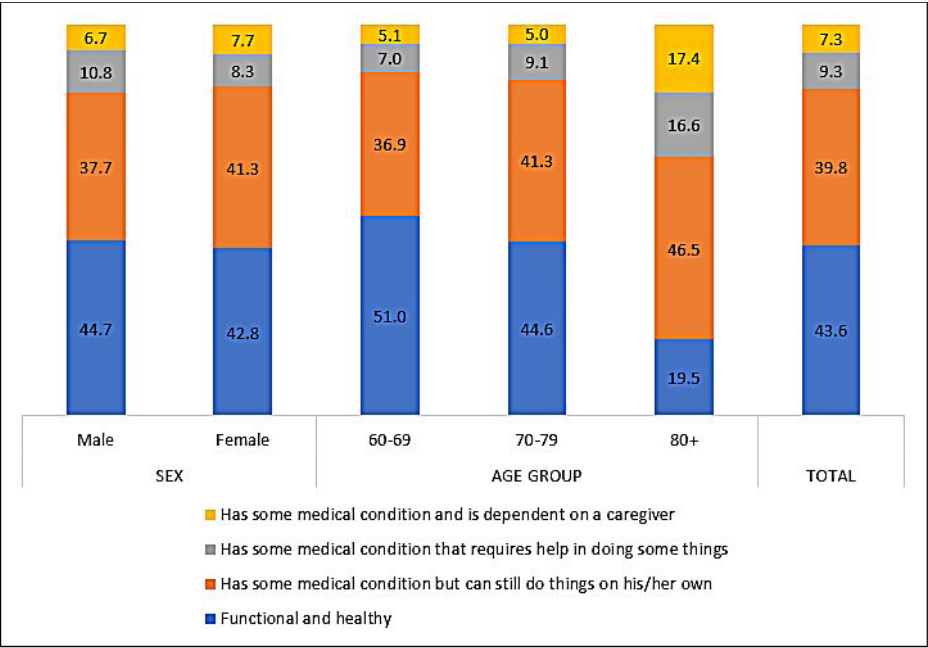
Functional Difficulties and Caregiving

When the adult children were asked to describe the functional abilities of their parents, 43.6% of them reported that their parents are still functional, although the proportion reduces as their parents age. About 40% of the adult children said their parents have some medical conditions but are still functional and healthy; only 7.3% perceived their parents as having medical conditions and need the assistance of a caregiver (Figure 13.2).

The health and functioning of OPs decline with advancing age. The proportion of children who claimed their parents are functional and healthy decreases from 51% for those with parents in the youngest cohort (aged 60–69) to 19.5% for those with parents in the oldest cohort (aged 80+).

We asked adult children who mainly help OPs who are perceived to require help in doing some things or who need a caregiver. Findings showed that care for OPs was mainly provided by respondents (55%) and about 20% by other family members.

Figure 13.2. Perception of Children on the Health Status of Older Persons by Sex and Age of Older Persons (%)



Source: Calculated by PHAD using original LSAHV data.

About 10% of respondents said that the OP's grandchildren were the main providers of assistance (Table 13.5). Only 0.3% of OPs was assisted by paid help. More female than male adult children helped their ageing parents (69.2% compared to 36.5%). More male than female OPs were receiving care from their grandchildren (15.5% compared to 5.4%).

The level of caregiving varies with the age of the OP. For example, the proportion of respondents who take care of their ageing parents increases as the OPs reach their 80s. In contrast, caregiving provided by the OPs' spouse to the OP decreases with the advancing age of OPs. This may be explained by the declining physiological condition of OPs and their spouse as they age. On the other hand, the levels of caregiving provided by grandchildren and other family members decrease with advancing age.

Table 13.5. Perception of Children on the Health Status of Older Persons by Sex and Age of Older Persons

Health Status	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Health status of Older Person						
Functional and healthy	44.7	42.8	51.0	44.6	19.5	43.6
Has some medical condition but can still do things on his/her own	37.7	41.3	36.9	41.3	46.5	39.8
Has some medical condition that requires help in doing some things	10.8	8.3	7.0	9.1	16.6	9.3
Has some medical condition and is dependent on a caregiver	6.7	7.7	5.1	5.0	17.4	7.3
N	1,162	1,731	1,158	973	762	2,893
Person who mainly provides assistance to Older Person						
Mainly self	36.5	69.2	46.6	50.2	66.9	55.0
Mother/Father	17.4	1.4	10.9	3.0	2.9	8.4
Sister	0.7	3.0	1.4	1.5	3.0	2.0
Brother	6.1	1.8	3.9	3.7	3.3	3.6
My children	15.5	5.4	11.7	9.9	7.8	9.8
Other family members	21.8	18.9	25.5	21.3	13.8	20.2
Paid help	0.4	0.2	0.0	0.5	0.4	0.3
Others (daughter-in-law, etc.)	1.7	0.1	0.0	0.0	2.1	0.8
N	198	314	108	135	269	512

Source: Calculated by PHAD using original LSAHV data.

Cognitive Decline of Older Persons

We asked the adult child respondents to assess their parents' cognitive decline in the 2 years preceding the interview using the short form of the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE). The IQCODE measures cognitive decline from a premorbid level in the older population through the reports of informants, such as friends or family members (Jorm, 2004). The short version was developed by Jorm in 1994 from the original 26-item version, covering two aspects of memory (acquisition of new information and retrieval of existing knowledge), as well as verbal and performance intelligence over a certain period (Jorm, 2004; Jorm and Korten, 1988).

In the LSAHV, the adult child respondents were asked to describe how their parents fare in terms of remembering conversations and personal information, operating household machinery, applying reasoning and knowledge, and handling financial matters. In particular, we asked the adult children the list of questions provided in Table 13.6 (e.g. 'Compared with 24 months ago, how is ____ [name of OP respondent] at remembering things about family and friends, such as occupations, birthdays, and addresses? Has it improved, remained the same (no change), or worsened?'). The results for those who said their parents' memory had worsened are shown in the same table.

Based on the adult children's assessment, OPs appear to struggle the least in making decisions on everyday matters, handling money for shopping, and managing financial matters. Regardless of the OPs' sex, spatial memory deteriorated the most in the 2 years before the survey. There are 33.6% and 30.9% of adult children claiming that their parents struggle with recalling conversations a few days later and remembering things about family and friends, respectively. The proportion reported that their parents have problems with remembering things that have happened recently and remembering where things are usually kept are 30.5%. About 30% of adult children said their parents have difficulty learning to use a new gadget or machine around the house.

Overall, the adult children reported that their mothers had suffered greater deterioration in the past 2 years compared to their fathers for all the items listed in Table 13.6. As expected, the adult children perceived a decline in their parents' cognitive functioning with advancing age.

Table 13.6. Perception of Children on the Cognitive Decline of Older Persons by Sex and Age of Older Persons

Perception of Children on Cognitive Decline of Older Person	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Percent of children who think that the following cognitive functions of Older Person worsened in the past two years:						
Remembering things about family and friends, such as occupations, birthdays, and addresses	29.1	32.1	24.8	29.2	51.8	30.9
Remembering things that have happened recently	28.0	31.1	23.6	28.0	51.1	29.8
Recalling conversations a few days later	29.4	31.3	24.4	29.8	50.0	30.5
Remembering [his/her] address and telephone number	30.8	35.6	28.5	32.4	50.8	33.6
Remembering what day and month it is	26.8	28.8	21.8	26.7	48.8	28.0
Remembering where things are usually kept	26.3	27.6	20.2	28.0	46.6	27.0
Remembering where to find things which have been put in a different place from usual	27.9	32.3	23.9	31.1	49.6	30.5
Knowing how to work familiar machines around the house	22.9	24.6	18.5	23.1	41.6	23.9
Learning to use a new gadget or machine around house	24.8	26.5	20.8	25.3	41.6	25.8
Learning new things in general	28.4	30.2	24.8	30.7	42.0	29.5
Following a story in a book or on TV	21.6	22.8	17.5	20.7	39.3	22.3
Making decisions on everyday matters	17.7	20.8	13.4	21.1	35.8	19.5
Handling money for shopping	18.2	18.4	12.8	17.4	35.7	18.3
Handling financial matters; for example, the pension, or dealing with the bank	17.4	20.6	14.3	20.4	32.8	19.3
Handling other everyday arithmetic problems	23.9	27.1	21.1	25.6	40.4	25.8
Using his/her intelligence to understand what's going on and to reason things through	24.2	27.7	20.5	26.4	43.4	26.2
N	1,165	1,733	1,158	975	765	2,898

Source: Calculated by PHAD using original LSAHV data.

Attitudes and Beliefs of Children

Adult children's perceptions of a range of issues on ageing, such as gender equality, filial concerns, and living arrangements, were assessed in the study. The adult children of OP respondents were asked if they agree or disagree with the set of statements listed in Table 13.7. The table presents the results for those who agreed with the statements provided.

Generally, adult children have a universally positive opinion that children are obliged to take care of their ageing parents (98.1%), regardless of their parents’ sex and age. They also have a strong opinion about parents’ responsibility to their children, with 87.4% agreeing that it is the parents’ duty to do their best for their children even at the expense of their own well-being. Traditional beliefs on gender roles still remain amongst children of OPs. About 57% of the adult children agree with the traditional division of labour (i.e. men are the breadwinners whilst women take care of the household), and less than half of them (43.6%) agree that co-residence with a daughter as opposed to a son is a more suitable living arrangement for ageing parents.

Table 13.7. Attitudes and Beliefs of Children
by Sex and Age of Older Persons

Attitudes and Beliefs of Children	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
% of children who agree with the following statements:						
A child is expected to support and take care of his/her aged parents	98.3	97.9	97.8	99.1	97.4	98.1
It is acceptable for someone in their 60's or older to fall in love.	76.8	73.2	77.9	71.5	69.6	74.7
It is acceptable for someone in their 60's or older to (re)marry if they find a suitable partner.	68.6	63.0	68.5	61.6	61.0	65.3
It is acceptable for children who looked after their parents to inherit larger portions of their estate when they pass away	84.3	83.0	83.2	83.7	84.5	83.6
It is better for the elderly parent to live with a daughter than with a son.	42.1	44.7	40.6	46.6	48.6	43.6
Men should work for the family, and women should stay home and take care of the household.	52.6	60.4	54.3	62.7	57.9	57.2
It is the parents' duty to do their best for their children even at the expense of their own wellbeing.	87.7	87.3	88.1	87.7	84.9	87.4
N	1,164	1,729	1,156	973	764	2,893

Source: Calculated by PHAD using original LSAHV data.

Adult children appear to agree with OPs on issues relating to inheritance (chapter 8). About 84% of adult children agree that it is acceptable for children who looked after their parents to inherit larger portions of their estate when their parents die. Adult children also support the romantic involvement of their parents. A high proportion of adult children (74.7%) think it is acceptable for people above the age of 60 to fall in love, and 65.3% believe it is acceptable for those in their 60s and over to (re)marry if they find a suitable partner.

However, the adult children's opinions on issues of ageing vary slightly depending on whether their fathers or mothers are concerned. For example, more adult children are open to the idea of their fathers rather than their mothers falling in love and (re)marrying in their old age. However, the number of children decreases with the increase of their parents' age. Compared to children of female OPs, more children of male OPs agree that it is their parents' responsibility to care of their children. Less than 50% of the child respondents think it is better for ageing parents to live with a daughter than with a son, and the numbers increase as the OPs age.

Summary, Conclusions, and Recommendations

This chapter provided an overview of OPs' characteristics, relationships, support provision, and attitudes and beliefs from the perspective of their adult children, unlike the previous chapters, which showed findings from the point of view of the OP respondents. This summary highlights one of the strengths of the LSAHV: it collected common data from both the OPs and their adult children, allowing for a cross-validation of findings. Future analyses can explore and examine the parent-child dyad more deeply by assessing the intergenerational relations from the perspective of both the OPs and their adult children.

Results indicated a high proportion of adult children who are co-residing with their ageing parents and those not living with their parents but reside next door. These results are consistent with the findings reported by OPs regarding their current living arrangement, as discussed in chapter 3, which showed that co-residence with children is their most common living arrangement. Co-residence with children and living next door increase with the advancing age of the OPs.

High levels of intergenerational exchange of support, visits, and communication observed in the study are probably related to the close proximity of adult children and their parents. There is also an active albeit disproportional exchange of instrumental, emotional, and/or financial assistance, with the flow from adult children to their parents exceeding the reverse flow. The familial net of relationships is multigenerational, going beyond the OPs' children to include the grandchildren. Our findings showed a higher proportion of OPs receive financial and emotional support from their adult children compared to other support. About 10% of grandchildren are mainly in charge of helping OPs with difficulties in health and functioning.

Most adult children perceive their parents are capable of living independently despite some medical conditions. Adult children and other family members mainly provide care to OPs who require assistance. An almost-universal proportion of adult children expressed positive views regarding filial expectations for adult children to care for and support their ageing parents, and this is reflected in their considerable share in providing care for their ageing parents. Further analysis could uncover some factors that may prevent adult children from assuming caregiving roles, particularly with the findings indicating that a considerable proportion of OPs had been suffering from cognitive decline in the years preceding the survey. Future studies could also look into how the persistence of gender bias in adult children's perceptions of OP roles and functions may affect the attainment of more equitable conditions for the older sector in general.

References

- Baltes, P.B. and M.M. Baltes (1990), 'Psychological Perspectives on Successful Aging: The Model of Selective Optimization with Compensation', in P.B. Baltes and M.M. Baltes (eds.), *Successful Aging: Perspectives from the Behavioral Sciences*. New York, NY: Cambridge University Press, pp.1–34.
- Cheng, S.-T., H.H. Fung, L.W. Li, T. Li, J. Woo, and I. Chi (2015), 'Successful Aging: Concepts, Reflections, and its Relevance to Asia', in S.-T. Cheng, I. Chi, H.H. Fung, L.W. Li, and J. Woo (eds.), *Successful Aging: Asian Perspectives*. Dordrecht, The Netherlands: Springer, pp.1–21.
- Choi, N.G. (2003), 'Coresidence between Unmarried Aging Parents and their Adult Children: Who Moved In with Whom and Why?', *Research on Aging*, 25, pp.384–404. [doi:10.1177/0164027503025004003](https://doi.org/10.1177/0164027503025004003) (accessed 10 December 2019).

- Crimmins, E.M. and D.G. Ingegneri (1990), 'Interaction and Living Arrangements of Older Parents and their Children: Past Trends, Present Determinants, Future Implications', *Research on Aging*, 12, pp.3–35. doi:10.1177/0164027590121001 (accessed 10 December 2019).
- Ingersoll-Dayton, B. and T.C. Antonucci (1988), 'Reciprocal and Nonreciprocal Social Support: Contrasting Sides of Intimate Relationships', *Journal of Gerontology*, 43(3), pp.565–73. doi:10.1093/geronj/43.3.s65 (accessed 10 December 2019).
- Jorm, A.F. and A.E. Korten (1988), 'Assessment of Cognitive Decline in the Elderly by Informant Interview', *British Journal of Psychiatry*, 152, pp.209–13. doi:10.1192/bjp.152.2.209 (accessed 10 December 2019).
- Jorm, A.F. (1994), 'A Short Form of the Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE): Development and Cross-validation', *Psychological Medicine*, 24, pp.145–53. doi:10.1017/S003329170002691X (accessed 10 December 2019).
- Jorm, A.F. (2004), 'The Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE): A Review', *International Psychogeriatrics*, 16(3), pp.275–93. doi:10.1017/S1041610204000390 (accessed 10 December 2019).
- Lubben, J. and M. Gironde (2003), 'Centrality of Social Ties to the Health and Well-being of Older Adults', in B. Berkman and L. Harootyan (eds.), *Social Work and Health Care in an Aging Society: Education, Policy, Practice, and Research*. New York, NY: Springer, pp.319–50.
- Pillemer, S.C. and R. Holtzer (2016), 'The Differential Relationships of Dimensions of Perceived Social Support with Cognitive Function among Older Adults', *Aging & Mental Health*, 20(7), pp.727–35. doi:10.1080/13607863.2015.1033683 (accessed 10 December 2019).
- Shapiro, A. (2004), 'Revisiting the Generation Gap: Exploring the Relationships of Parent/Adult–Child Dyads', *The International Journal of Aging and Human Development*, 58(2), pp.127–46. doi:10.2190/evfk-7f2x-kqnv-dh58 (accessed 10 December 2019).
- Silverstein, M., S.J. Conroy, H. Wang, R. Giarrusso, and V.L. Bengtson (2002), 'Reciprocity in Parent–Child Relations over the Adult Life Course', *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57(1), pp.S3–S13. doi:10.1093/geronb/57.1.s3 (accessed 10 December 2019).

- Wiemers, E.E., V. Slanchev, K. McGarry, and V.J. Hotz (2016), 'Living Arrangements of Mothers and their Adult Children over the Life Course', *Research on Aging*, 39(1), pp.111–34. [doi:10.1177/0164027516656138](https://doi.org/10.1177/0164027516656138) (assessed 10 December 2019).
- Zhu, S., J. Hu, and J.T. Effird (2012), 'Role of Social Support in Cognitive Function amongst Elders', *Journal of Clinical Nursing*, 21, pp.2118–25. [doi:10.1111/j.1365-2702.2012.04178.x](https://doi.org/10.1111/j.1365-2702.2012.04178.x) (assessed 10 December 2019).

Discussions, Conclusions, and Recommendations

Nguyen Cong Vu, Mai Thi Tran, Linh Thuy Dang, and Yasuhiko Saito

The 2018 Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) conducted by the Institute of Population, Health and Development (PHAD) is the first longitudinal study on the health of older persons (OPs) in Viet Nam. The baseline survey is a nationally representative survey of community-dwelling older adults aged 60 and above. Information was obtained from a sample of older persons and their caregivers/potential caregivers and their children. The survey gathered quite extensive information on the health status, health service utilisation, economic status, and social relations of the OPs in Viet Nam. Data from the LSAHV study provided important and essential information on the challenges of ageing in Viet Nam from the household to the national levels. Data from the study are important scientific evidence to help policymakers and leaders of national programmes design appropriate policies. In addition, they can rely on this scientific evidence to develop appropriate health interventions for the OPs in Viet Nam.

According to the World Population Prospects (UNDESA Population Division, 2017), the proportion of those aged 60 and above to the total population of Viet Nam exceeded 10% in 2018, making Viet Nam an ageing population. By 2030, the proportion will exceed 20%, turning Viet Nam into a high ageing society (UNDESA Population Division, 2017). The rapidly increasing share of the older population and low birth rates in many areas of Viet Nam are now putting the country at risk of not being able to concentrate on economic development and providing the necessary social support for older adults. This is because the ageing population is highly dependent on the support of the OPs' children, families, and the society.

In this chapter, we present the key findings from the LSAHV which may help policymakers formulate evidence-based policy to deal with rapidly increasing older

adults in the society. We would also like to discuss the current status of OPs in Viet Nam and make recommendations to improve their well-being.

The Older Persons in Viet Nam have Generally Low Educational Attainment; A Relatively High Proportion of Female Respondents are Still Working

Results from the LSAHV baseline survey showed that only about 6.5% of the OPs had a college or university degree or higher, up to 28% had never been to school, and about one third finished primary school. The low education level of OPs can be explained by the fact that Viet Nam has only officially developed its education system for the entire population after it gained independence in 1945.

Marital status between male and female respondents differ significantly. Whilst 82.1% of male respondents are currently married, less than a half (47.7%) of female respondents are currently married. The majority of female respondents not currently married are widowed. This fact is partially reflected in the differences in living arrangements of male and female OPs. The proportion of those who are living alone amongst female OPs is more than twice as high as for male OPs. According to the 2019 census report (Central Population and Housing Census Steering Committee, 2020), women aged 60 live 2.4 years longer (20.7 years vs 18.3 years) than men of the same age. Women marry 4 years later than men (27.2 years old vs 23.1 years old) on average. As this pattern continues in the future, the proportion of widows amongst OPs stays high and the proportion of living alone in old age may increase.

The proportion of female respondents still working at the time of the survey was about the same as the male counterparts, that is, 38% for male respondents and 31% for female respondents. According to the statistics, the labour force participation rate for females aged 15 and above and age group 55–64 in Viet Nam is the highest amongst the neighbouring countries in Asia (International Labour Organization, 2020). The labour force participation rate for females aged 65 and over is also amongst the highest compared to other Asian countries. Do they enjoy working? Or are they working out of necessity? We need to conduct detailed analyses on reasons for those who are still working at the time of the baseline survey.

Sixty-seven percent of OPs live in rural areas. As age increases, the proportion of those living in rural areas increases. The difference in the lives of OPs in the rural vs urban areas should be an important aspect in understanding the well-being of OPs. However, we focused on differences in the lives of OPs between gender and age groups in this first LSAHV baseline report. We will look at differences by place of residence in our detailed analyses of the LSAHV data to understand the lives of OPs in today's Viet Nam.

Older Persons in Viet Nam seem to be Healthy in General, yet They Report having Diseases and Health Conditions

In general, responses to the self-reported health status questions indicate that three-quarters of the older adults in Viet Nam considered themselves of average health or healthier. However, for those aged 80 and above, the proportion decreased to about half. At the same time, OPs reported having health conditions and diseases. In particular, arthritis, neuralgia, or rheumatism (45.8%), chronic back pain (30.3%), and high blood pressure (40.9%) are very common amongst the respondents. Almost half of OPs aged 70 and above reported having high blood pressure. The prevalence of digestive diseases (18.6%), cataract (12.3%), and heart diseases (12.2%) are relatively high. The prevalence rate for female respondents are higher compared to the prevalence rate for male respondents for most of the conditions and diseases reported in the baseline survey.

OPs in Viet Nam are often troubled with pain; for example, 30.3% reported suffering from chronic back pain. More female than male OPs are often troubled by chronic pain (42.6% vs 31.2%). Almost 60% of those who reported being troubled with pain said that the pain made it difficult for them to do usual activities. The location of the pain as reported by OPs include the back, head, shoulder, joints, and neck. OPs tend to accept having pain as something that comes with age or 'age normative' (Williamson and Schultz, 1992, 1995) However, there are reasons and causes that make OPs experience pain. This needs to be explored further. Moreover, pain in old age could also lead to health-related problems such as functional limitation, disability, sleep disorder, and depression (Molton and Terrill, 2014). The relationship between pain and sleep disorder was reported by Chen et al. (2019) using data from Asia. We should be able to contribute to the growing number of research on pain amongst older adults using the LSAHV data.

The self-reported health status of OPs mentioned above – as well as having conditions, diseases, and pain – give us a mixed picture of the health status of the survey respondents. Whilst 23.8% respondents said they are healthier than average and 47.7% reported they have average health, a significant proportion of OPs reported having conditions, diseases, and pain. Previous studies indicated that older adults may compare their experiences to those of more medically ill peers (Idler, 1993; Rakowski and Cryan, 1990) and thereby concluded that OPs are better off than others whom they know. Census report indicated that life expectancy increased between 2009 and 2019 but the amount of increase was much smaller compared to the increase observed between 1999 and 2009 (Central Population and Housing Census Steering Committee, 2020). There is a need to carefully investigate the relationship between perceived health status and actual health conditions of OPs in Viet Nam.

A similar pattern on the responses of men and women to having conditions and diseases was also observed regarding functioning health. Female respondents almost always reported a higher prevalence on negative categories of questions on functioning health, including activities of daily living, instrumental activities of daily living, Nagi functioning measures, and two International Classification of Functioning, Disability and Health (ICF)-based measures of functional health, the Global Activity Limitation Index, and Washington Group's Short Set of Questions on Disability. Having conditions and diseases, functioning loss, and disability are all predictors of mortality. Yet, females live 2.4 years longer, on average, at age 60, as mentioned before (Central Population and Housing Census Steering Committee, 2020). We are observing the male–female survival–health paradox, discrepancy between the health and survival of the sexes – men are physically stronger and have fewer disabilities, but have higher mortality at all ages compared with women (Oksuzyan et al., 2008). We hope that the LSAHV data will elucidate the causes of such paradox.

We also need to pay attention to OPs aged 80 and over in terms of functioning health. Whilst 7.2% of OPs aged 60–69 reported at least one ADL difficulty to perform, 40.6% of OPs aged 80 and above reported having difficulty performing at least one ADL. Only 2.4% of OPs aged 60–69 reported having difficulty in at least one instrumental activity of daily living (IADL) whereas 24.8% of OPs aged 80 and above reported difficulty in performing at least one IADL. These results indicated that, in Viet Nam, female respondents and OPs aged 80 and above face greater functioning problems and disability.

High blood pressure and cardiovascular disease are common amongst older adults worldwide. As expected, these are the two common diseases reported by OPs in Viet Nam. Specifically, 40.9% of OPs have high blood pressure. We will have an in-depth analysis about the prevalence and management of hypertension in OPs. Although the health force has covered the commune level, providing more health staff to cover a wider area is not enough to support and monitor a large number of hypertensive patients. An alternative is to use e-health and information technology (IT) applications to support patients with diabetes and hypertension. The use of these technologies must be studied and applied in Viet Nam.

Survey respondents are sleeping less than the ideal hours of sleep at night although majority of them (78.8%) said they feel rested upon waking up in the morning. Seven to eight hours of sleep is recommended to keep people healthy but OPs sleep only 5.4 hours at night on average. In addition, a large proportion of respondents reported sleep disorders despite being satisfied with the quality of their sleep. Based on a study conducted in Japan, sleep disorder may be a risk factor for depression (Yokoyama, et. al., 2010). Thus, a similar study to examine sleep disorder in Viet Nam is important.

The LSAHV baseline survey also collected anthropometric measures. Based on the measured height and weight, we computed for body mass index (BMI). Obesity is becoming a major public health issue in both developed and developing countries. In Viet Nam, evidence is not enough yet to establish that obesity is an issue for older persons. However, being underweight may be an issue amongst survey respondents as shown in the recently published study for Japan (Sugawara and Saito, 2020). Those who are underweight as measured by the BMI tend to have a lower life and health expectancy. This should be an important focus of study in the coming years.

In terms of smoking, the proportion of current smokers amongst male respondents is 33.0% and for female respondents, 1.6%. The prevalence of smoking amongst the male adult population in Viet Nam (Van Minh et al., 2017) is extremely high compared to countries of the Organisation for Economic Co-operation and Development (OECD, 2019). This fact is reflected in the proportion of both current and former smokers amongst male respondents. Scientific findings from other countries and Viet Nam have proved that tobacco is the cause and a risk factor of cancer and heart disease. There should be policies to encourage the adult population to quit smoking. Such policy could improve the health status of current and future OPs in Viet Nam.

Healthcare and Use of Healthcare Services of Older Persons in Viet Nam

In general, when medical attention is needed, OPs in Viet Nam are mainly examined and treated at district or provincial hospitals. Very few people have access to services at provincial specialised or central hospitals. This is understandable because nationwide, specialised hospitals are mainly based in Ha Noi and Ho Chi Minh City. In fact, only one geriatric hospital is based in Ha Noi. The Ministry of Health has already issued a directive (CV2248/2018/BYT-KCB) requiring all provincial general hospitals to establish a geriatric department; however, not all provincial hospitals have resources to train for geriatric specialties.

Inpatient and Outpatient Care

About 22% of OPs experienced at least an overnight hospitalisation in the past 12 months at the time of survey. When respondents were asked about who paid for the cost of hospitalisation, 36.9% of male respondents answered they paid for it themselves and about the same proportion (32.9%) of male respondents answered their children paid mostly for it. For female respondents, 47.8% of them answered that their children paid mostly for the hospitalisation whilst 37.0% said they paid for it themselves. There are also clear differences across age groups of respondents. Amongst OPs aged 60–69, 29.0% identified their children as responsible for paying their hospitalisation expenses. Children assuming responsibility for their parents' healthcare became more apparent as their parents get older: 53.9% of OPs aged 70–79 and 64.6% of OPs aged 80 and over reported that their children paid the OPs' hospital bill.

About 28% of respondents visited the hospital for illness or accident without hospitalisation in the past 12 months. Eighty percent of them were treated at the commune health centres or district hospitals.

Amongst baseline survey respondents, 91.0% of them were covered by health insurance. Majority of them were covered by the insurance for merit people such as veterans, Vietnamese Heroic Mothers (who have had many children who were soldiers who died in the war), spouses of martyrs, and war invalids (37.5%) and the voluntary insurance (32.3%).

About 11% of OPs were covered by the health insurance for poor people. Although many OPs seemed to have benefited from health insurance for medical treatment, there were respondents who did not see a doctor when they felt ill because of economic reasons.

Although the proportion of OPs with any type of health insurance in Viet Nam is high (> 90%), mostly they are part of retirement benefit and meritorious insurance, followed by voluntary insurance. However, up to 35% said that the primary reason they do not see a doctor is not having enough money. This implies that other expenses besides healthcare costs that are covered by health insurance limit the access of OPs to health services.

When they become ill, Older Persons in Viet Nam are mainly Cared for by their Spouses or Children; Nursing Homes are not very Popular and Majority of Older Persons do not want to get in There

For both short-term illnesses and long-term care, spouses, sons, and daughters are the most frequently mentioned family members who are OPs' caregivers. Although the proportion of those who answered daughter-in-law as caregiver is relatively small, this suggests that wives tend to assume the filial responsibility of their husbands by taking care of their parents-in-law. Whilst OPs may consider their son as a caregiver, the actual work of taking care of them may be done by their daughters-in-law. The involvement of social workers or neighbours and the support of others in caring for OPs is quite low. Although most OPs in Viet Nam are cared for by their family members at home, this trend may not be sustainable in the future. With the increasing number of OPs living alone or living with their partner only, as well as the decreasing number of children amongst Vietnamese families, the future generations of OPs may have to rely on outside of family members for their long-term care needs. The percentage of family members who were trained on basic care techniques for OPs is also quite low (<2%). This suggests the potential demand for caregivers' training, which can help families in ensuring proper care for older people.

In terms of long-term care, OPs would like their spouses, sons, and daughters to be their caregivers. The nursing home is their last recourse for long-term care. This implies that the majority of Vietnamese are still not familiar with the concept of a nursing home and do not like living in it, away from family and children. This can also

be due to the high cost of living in private retirement homes which is far beyond the affordability of the OPs. The cost of state-owned retirement homes managed by the Ministry of Labour and the Department of Labour, War Invalids and Social Affairs is cheaper and can be fully subsidised if the household is poor. However, the number of beds is limited and the waiting list is extremely long. Very few OPs can access and live in state-run retirement homes when they are alone or very poor.

Half of the respondents think it is a good idea to have homes for the aged because (i) the family is spared the burden, (ii) OPs are better cared for, (iii) OPs have the opportunity to get acquainted with other OPs, and (iv) those alone are taken care of. However, quite a large percentage of OPs (38%) are also against the idea of having a home for older adults because they feel ashamed to go to a nursing home, do not want to live with strangers and away from family, and because of the expensive costs.

Majority of Older Persons in Viet Nam are Satisfied with their Current Income, but They are still Working to Earn Income and Quite Dependent on Their Children for Money

About one-third of the OPs in Viet Nam think that their income is enough to live on with still some money left, and about half of the OPs think their income is just enough for their expenses. Only less than 20% of survey respondents have difficulty in meeting everyday life expenses.

As mentioned earlier in this chapter, a sizeable proportion of the survey respondents are still working. This is reflected on the response to the question about their most important source of income. Income from work is ranked first by about 32% of respondents. Second to income from work is pension (more than 22%) whilst money from children is ranked third (21.4%). Interestingly, income from family business and support by welfare funds through the Social Protection Department of the Ministry of Labour, Invalids, and Social Affairs share the same proportion, 7.7%, and are ranked fourth.

When we look at the most important source of income by age group, a different picture emerged. For those aged 70–79, 28.6% of OPs reported pension as their most important source of income and it also ranked the first. This is followed by income from children (26%), and earning from work (22.0%).

One in ten OPs aged 80 and over still cited earning from work as their most important source of income. This however, is considered fourth amongst the list of main sources of income. For them, money from their children is the most important source of income (34.4%) followed by government subsidies (24.4%). About 20% of them also cited pension as the most important source of income. These indicate more dependence on support from children and the government as OPs get older.

Initial research results showed that 95% of OPs own some assets. Majority of OPs (85.5%) considered the house they are living in as an asset. About 15% have additional real estate properties and nearly half of them keep cash at home (46.5%). Less than 7% own a bank account.

Vietnamese Older Persons have a Close Relationship with Their Children

More than 60% of OPs co-reside with one of their adult children. In addition, at least one of the children who are not living with OPs keeps a close contact with them. More than 85% of OPs have visited one of their children at least once in the past year, and more than 93% of them have called or written to one of their children. Similarly, more than 95% of their children visited them, called via phone, or wrote letters in the last year.

There were also intergenerational exchanges between the OPs and their co-residing and non-co-residing children. More than a quarter of OPs gave financial support to their co-residing child whilst 18.7% provided financial support to non-co-residing children. The proportion of OPs giving material and instrumental support to the co-residing child is higher than the non-co-residing children. In terms of emotional support, a similar proportion of OPs supported both co-residing and non-co-residing children.

More than 60% of OPs received financial support from both the co-residing and the non-co-residing children. Majority were receiving material, instrumental, and emotional support from both co-residing and non-co-residing children. Whilst it is good for OPs to receive support from their children, studies had also shown that a one-way flow of support is detrimental to the OPs' well-being (Thomas, 20010). It is important to keep intergenerational exchange, meaning OPs need to have a chance

to offer something to their children. We have to further examine the relationship between intergenerational exchange and OPs' general well-being.

Social Services for the Older Persons are Well Developed but Rarely Used; there is a need to Inform Older Persons of Such Services

The government of Viet Nam has very clear policies to support the OPs, such as prioritising the use of health services, reducing and exempting public transport tickets or tickets to sightseeing places, free legal support for lonely OPs, personal income tax exemption for people over 65 years old, etc. However, the percentage of OPs who are aware of these policies is quite limited (less than 30%). OPs in big cities know and use these benefits more than OPs in rural areas. The government needs to disseminate such information to OPs in both urban and rural areas of the country.

Use of Information Technology is Relatively Low amongst Older Persons

We asked OPs about the use of IT. Overall, 66.7% of male respondents and 52.2% of female respondents own a cell phone. The proportions for OPs aged 60–69, 70–79, and 80 and above are 72.2%, 50.0%, and 23.1%, respectively. The results clearly indicated the differences by age group but not by gender. However, there are differences by gender and by age group in Internet access although the proportion accessing the Internet is low: 17.5% of male respondents and 9.0% of female respondents reported they have Internet access. By age group, 17.0% of OPs aged 60–69, 8.8% of OPs aged 70–79, and only 2.8% of OPs aged 80 and above have access to Internet. The use of information and communication technology amongst OPs may reduce feelings of loneliness and social isolation. It can also be used as a venue to disseminate information necessary for OPs to know or is beneficial to them. Almost half of those who use IT reported that they do not rely on anyone for help. They taught themselves how to use the technology.

Policy Recommendations

Based on the preliminary descriptive analyses of the LSAHV baseline data by gender and by age group, the following policy recommendations for OPs in Viet Nam can be made.

On Health-related Policy Recommendations

According to the World Health Organization (WHO),¹ one in four men and one in five women in the world had hypertension in 2015. Hypertension or high blood pressure is a well-known risk factor of many diseases, such as cardiovascular and cerebrovascular diseases, currently two leading causes of death in Viet Nam (Center for Disease Control and Prevention, 2019). Studies on hypertension in Viet Nam, particularly amongst OPs, are scarce but the descriptive analyses showed a relatively higher prevalence rate of hypertension amongst OPs than the younger age groups (Tran et al., 2020; Do et al., 2015; Meriquari et al., 2019). Previous studies also indicated that the prevalence rate increases as age increases. Because population ageing is expected to continue in Viet Nam, the number of hypertensive OPs is expected to increase if the current prevalence rate of hypertension stays the same. If the prevalence rate increases with population ageing, the number of OPs with hypertension may surge in the future. This may in turn increase the prevalence of cardiovascular and cerebrovascular diseases and the number of deaths from these diseases. Because hypertension is preventable and treatable, the government may consider developing preventive measures against hypertension for middle-aged persons and OPs. In addition, it may be effective to develop a programme that will compel OPs to undergo regular health examinations for an early diagnosis of these diseases.

As mentioned earlier, life expectancy at birth had not improved much between 2009 and 2019. Improvement in life expectancy at age 60 was also minimal between the same period despite continued economic development, i.e. 0.2 years for males and 0.3 years for females (Central Population and Housing Census Steering Committee, 2010 and 2020). What this suggests is that OPs with hypertension may have been dying after developing diseases caused by the condition. Understanding the actual prevalence rate of high blood pressure amongst OPs and the association of hypertension to diseases and mortality is important. A detailed analysis of prevalence, awareness, treatment, and control of hypertension amongst OPs using the LSAHV baseline data and the results of the second wave of the LSAHV can contribute to our

¹ <https://www.who.int/news-room/fact-sheets/detail/hypertension> (accessed 15 July 2020).

understanding of the link between high blood pressure and the risks of cardiovascular and cerebrovascular diseases.

Another reason for the relatively high prevalence of hypertension in Viet Nam is the high rate of smoking amongst men. Although the rate of smoking amongst women is very low, women may be at risk due to secondhand smoking. One of the government's preventive measures against hypertension is to reduce smoking, which is a cause of hypertension. For the national smoking prevention programme, there should be strategies that support smoking cessation of OPs, such as the use of behavioural psychosocial measures, support for the distance treatment of smoking combined with distance coaching, mailing medicines combined with counselling via telephone or online.

The descriptive analyses of the LSAHV baseline survey data also indicated that the proportion of OPs who were treated at medical facilities both as an inpatient and outpatient over the past 12 months is higher compared to neighbouring developing countries such as China (Li et al., 2019), Indonesia (Madyaningrum et al., 2018), and the Philippines (Natividad, 2019). The government of Viet Nam is well aware of the increase in demand for healthcare utilisation amongst OPs as indicated by the Ministry of Health's executive order CV2248/2018. According to this executive order, all general hospitals in the provinces must establish a geriatric ward in their provincial general hospitals and assign inpatient beds to this ward. As already mentioned, the number of OPs needed to be treated at medical facilities will increase even if the healthcare utilisation rate stays constant.

At the same time, the government needs to prepare for programmes to train geriatric specialists throughout the country and to upgrade the facilities of provincial hospitals.

In addition, the government and medical schools may introduce in class and in online training programmes on geriatric medicine to general medical education and retraining of generalists, internists, and those specialising in family medicine as part of the preparation for the coming aged society of Viet Nam. It is well known that OPs tend to have comorbid conditions and sometimes do not show peculiar symptoms of a particular disease such as chest pain for heart diseases.

Although it is not new and is not only in Viet Nam, there have been calls on the importance developing geriatric medicine (Drickamer et al., 2006; Schroeder-Mullen, 1998; Chiang, 1998).

On Social Support and Economic Well-being

The government of Viet Nam is providing economic and social support to OPs as mentioned above. However, majority of OPs do not seem to receive information on such programmes. Only 27% of OPs are aware of the government's programme that provides privileges to senior citizens 60 years and above. The government needs to establish a method of sending information to OPs in the country. One way to achieve such goal is to develop a communication network through Internet in the country. Unfortunately, the use of IT by OPs is currently relatively low. By promoting the use of IT amongst OPs, useful information can reach OPs more efficiently. The same method may be also used to monitor the health condition of OPs, even those living in remote areas.

The LSAHV baseline results also suggested another policy recommendation on how to support the economic well-being of OPs in the future. As shown in this report, one-third of OPs above 60 years are still working. Almost 50% of those aged 60–69 are working at the time of the survey. The mandatory age of retirement in Viet Nam is 60 years for men and 55 years for women. Thirty percent of OPs considered earnings from their work as their most important source of income; another 30% said it is pension or subsidies from the government. Slightly more than 20% of OPs rely on their children. For those aged 80 and above, the proportion of OPs relying on their children increases to 33%. The government of Viet Nam has already decided to increase the retirement age for men to 62 years old and for women, to 60 years old. The country is probably moving towards the right direction. By increasing the retirement age, the contributions of those in the extended retirement ages will help increase the pension funds in Viet Nam. However, the government should monitor the changes in health status of those in the near-retirement ages. If the health status of those in the retirement ages is deteriorating, on average, increasing the retirement age may negatively impact on society as a whole.

In addition, Viet Nam will experience an unprecedented speed of ageing in the coming years because of the rapid decline in the total fertility rate between the 1970s to the 1990s (United Nations Department of Economic and Social Affairs, 2017).

What this suggests is that not only will the proportion of aged population increase but also the number of working age population in Viet Nam will decline. This in turn will negatively affect contributions to the pension funds by the working age population if the current contribution rate stays the same. Furthermore, current OPs have about four living children on average but future OPs may have only about two children on average. This means that the number of children supporting their ageing parents will be only half of what the current generation of OPs has. The current relationship between OPs and their children seems to be very strong, keeping their traditional values of filial piety. However, the government should not assume such traditional values to stay prevalent in society. Filial piety is a norm amongst Asian countries but such norm may not last forever. It was reported that filial piety amongst both children and older parents dramatically changed in the 1980s in Japan. Children no longer considered it necessary to support parents and parents started to value their independence and lowered their expectation of filial piety from their children (Ogawa et al., 2007). A similar report was also observed in the Republic of Korea (Harlan, 2014). Thus, the government must consider this attitude shift in designing programmes for OPs.

Other Recommendations

Viet Nam is now sending their care workers to foreign countries such as Japan and Germany. However, there may be more need for such care workers in the country because of population ageing. The LSAHV baseline results indicated that the short- and long-term care of older parents are provided within the family. The availability of caregiving for older parents may become scarce because of the effect of declining total fertility rate over the last 20 years and increasing demand for labour in the market. It is about time to develop programmes that will provide public long-term care system and training of caregivers in the country. The speed of population ageing in Viet Nam is extremely fast and the government needs to prepare for increasing demand of care workers as a profession before it becomes too late.

The results of the descriptive analyses of the LSAHV baseline survey data by gender and by age group were shown in this report. The findings from the analyses provided information needed to understand the current health, economic, social, and overall well-being of older adults aged 60 and above in Viet Nam. The government is well aware of the challenge caused by the ageing of the population.

We hope that these findings will be useful in formulating evidence-based policymaking for OPs' health-related well-being by the government. We also hope that these findings will be used to help improve the well-being of OPs by practitioners and all relevant agencies in the country.

An in-depth analysis of the data obtained from LSAHV 2018 should be further conducted to gain more detailed information and a better understanding of the health and social conditions of the OPs in Viet Nam.

References

- Centre for Disease Control and Prevention (2019), 'CDC in Vietnam', US Department of Health and Human Services, published May 2019.
- Central Population and Housing Census Steering Committee (2010), *The 2009 Viet Nam Population and Housing Census: Major Findings*. Ha Noi: Statistical Publishing House.
- Central Population and Housing Census Steering Committee (2020), *Results – the Viet Nam Population and Housing Census of 00:00 hours on 1 April 2019*. Ha Noi: Statistical Publishing House.
- Chen, T.Y., S. Lee, M. Gray, Y. Saito, A. Chan, and O.M. Buxton (2019), 'Longitudinal Relationship between Sleep Deficiency and Pain Symptoms among Community-dwelling Older Adults in Japan and Singapore', *Sleep*, 42(2), pp.1–11.
- Chiang, L. (1998), 'The Geriatrics Imperative: Meeting the Need for Physicians Trained in Geriatric Medicine', *JAMA*, 279(13), pp.1036–37. doi:10.1001/jama.279.13.1036-JMS0401-4-1.
- Do H.T., J.M. Geleijnse, M.B. Le, F.J. Kok, E.J. Feskens (2015), 'National Prevalence and Associated Risk Factors of Hypertension and Prehypertension among Vietnamese Adults', *American Journal of Hypertension*, 28(1):89–97. doi:10.1093/ajh/hpu092
- Drickamer, M.A., B. Levy, K.S. Irwin, and R.M. Rohrbaugh (2006), 'Perceived Needs for Geriatric Education by Medical Students, Internal Medicine Residents, and Faculty', *Journal of General Internal Medicine*, 21(12), pp.1230–34. doi:10.1111/j.1525-1497.2006.00585.x.

- Harlan, C. (2014), 'For South Korea's Seniors, A Return to Poverty as Confucian Filial Piety Weakens', *The Washington Post*. https://www.washingtonpost.com/world/asia_pacific/for-south-koreas-seniors-a-return-to-poverty-as-confucian-filialpiety-weakens/2014/01/20/19769cf2-7b85-11e3-97d3-b9925ce2c57b_story.html (accessed 9 November 2019).
- Idler, E.L. (1993), 'Age Differences in Self-assessments of Health: Age Changes, Cohort Differences, or Survivorship?', *Journal of Gerontology*, 48, S289–300. doi:10.1093/geronj/48.6.S289.
- International Labour Organization (2020), ILOSTAT database [database]. Available at <https://ilostat.ilo.org/data/>.
- Li, J., L. Shi, H. Liang, C. Ma, L. X, and W. Qin (2019), 'Health Care Utilization and Affordability among Older People following China's 2009 Health Reform: Evidence from CHARLS Pilot Study', *International Journal for Equity in Health* 18(62). <https://doi.org/10.1186/s12939-019-0969-3>.
- Madyaningrum E., Y.C. Chuang, K.Y. Chuang (2018), 'Factors Associated with the Use of Outpatient Services among the Elderly in Indonesia', *BMC Health Services Research*, 18(1), September, pp.707. doi:10.1186/s12913-018-3512-0.
- Meiqari L, Essink D, Wright P, Scheele F. (2019), 'Prevalence of Hypertension in Vietnam: A Systematic Review and Meta-Analysis', *Asia Pacific Journal of Public Health*, 31(2):101–112. doi:10.1177/1010539518824810
- Molton, I.R. and A.L. Terril (2014), 'Overview of Persistent Pain in Older Adults', *American Psychologist*, 69(2), pp.197–207. <https://doi.org/10.1037/a0035794>.
- Natividad, J.N. (2019), 'Healthcare and Healthcare Utilisation', in G.T. Cruz, C.J.P. Cruz, and Y. Saito (eds.), *Ageing and Health in the Philippines*. Jakarta, Indonesia: Economic Research Institute for ASEAN and East Asia, pp.89–104.
- Oksuzyan, A., K. Juel, J.W. Vaupel, K. Christensen (2008), 'Men: Good Health and High Mortality. Sex Differences in Health and Aging'. *Aging Clinical and Experimental Research*, 20, pp.91–102. <https://doi.org/10.1007/BF03324754>
- OECD iLibrary. Health at a glance 2019: OECD Indicators. <https://www.oecd-ilibrary.org/sites/21ac51dd-en/index.html?itemId=/content/component/21ac51dd-en> (accessed 1 July 2020).

- Ogawa, N., A. Mason, Maliki, R. Matsukura, and K. Nemoto (2007), 'Population Aging and Health Care Spending in Japan: Public- and Private-Sector Responses', in R.L. Clark, N. Ogawa, and A. Tason (eds.), *Population Aging, Intergenerational Transfers and the Macroeconomy*. Northampton, MA: Edward Elgar Publishing, Inc. pp.192–223.
- Rakowski, W. and C.D. Cryan (1990), 'Associations among Health Perceptions and Health Status within Three Age Groups', *Journal of Aging and Health*, 2, pp.58–80. doi:[10.1177/089826439000200105](https://doi.org/10.1177/089826439000200105).
- Schroeder-Mullen, H. (1998), 'Reframing the Geriatric Patient', *JAMA*, 279(13), p.1034. doi:[10.1001/jama.279.13.1034-JMS0401-2-1](https://doi.org/10.1001/jama.279.13.1034-JMS0401-2-1).
- Sugawara, Y. and Y. Saito (2020), 'The Role of Underweight in Active Life Expectancy among Older Adults in Japan', *Journal of Gerontology: Social Sciences* (online first).
- Thomas, P.A. (2010), 'Is it Better to Give or to Receive? Social Support and the Well-being of Older Adults', *Journal of Gerontology: Social Sciences*, 65B(3), pp.351–7, doi:[10.1093/geronb/gbp113](https://doi.org/10.1093/geronb/gbp113).
- Tran, Q.B. (2020), 'Risk factors for Non-Communicable Diseases among adults in Vietnam: Findings from the Vietnam STEPS Survey 2015', *Journal of Global Health Science*, 2(1):e7. <https://doi.org/10.35500/jghs.2020.2.e7>
- Van Minh, H. et al. (2017), 'Prevalence of Tobacco Smoking in Vietnam: Findings from the Global Adult Tobacco Survey 2015', *International Journal of Public Health* 62(Suppl 1), pp.121–9. doi:[10.1007/s00038-017-0955-8](https://doi.org/10.1007/s00038-017-0955-8).
- United Nations Department of Economic and Social Affairs (UNDESA), Population Division (2017). <https://population.un.org/wpp/> (accessed 20 September 2019).
- Williamson, G.M. and R. Schulz (1992), 'Pain, Activity Restriction, and Symptoms of Depression among Community-residing Elderly Adults', *Journal of Gerontology*, 47, pp.367–72. doi:[10.1093/geronj/47.6.P367](https://doi.org/10.1093/geronj/47.6.P367).
- Williamson, G.M. and R. Schulz (1995), 'Activity Restriction Mediates the Association between Pain and Depressed Affect: A Study of Younger and Older Adult Cancer Patients', *Psychology and Aging*, 10(3), pp.369–78. <https://doi.org/10.1037/0882-7974.10.3.369>.
- Yokoyama, E. (2010), 'Association between Depression and Insomnia Subtypes: A Longitudinal Study on the Elderly in Japan', *Sleep*, 33(12), pp.1693–702.

Annex A: LSAHV Sampling Design and Weights

Nguyen Cong Vu, Thuy Thi Thu Vu, and Mai Thi Thanh Nguyen

The 2018 Longitudinal Study on Ageing and Health in Viet Nam (LSAHV) is a survey with a nationally representative sample of 6,050 respondents aged 60 years and above living in community dwellings. The sample for the LSAHV is designed to produce results representative of the whole country, of urban and rural areas separately, and of the economic regions.

Sampling Design

The 2018 LSAHV baseline data collection employed a multistage sampling design. Provinces are the primary sampling units, villages are the secondary sampling units, and older persons (OPs) are the ultimate sampling units. Based on the latest census of 2009, the provinces were stratified with respect to the estimated number of the population aged 60+ in 2018. In total, data collection was conducted in 654 villages from the 10 provinces of the 6 regions of Viet Nam.

Sample Estimation

The survey focused on three age groups: 60–69, 70–79, and 80+. Therefore, the sample was estimated to represent these three age groups and represent the six ecoregions of Viet Nam, Ha Noi, and Ho Chi Minh City.

The sample estimation for each ecoregion:

$$n = \frac{(z_{1-\alpha/2})^2 * P * (1-P) * deff}{d^2 * R}$$

Of which:

- n: Sample size, 60+
- $z\alpha/2$: Z value of a certain confidence interval; 95%. $Z_{0,025} = 1.96$
- P: Estimate prevalence of disease
- deff: Designed effect to sample
- d: absolute precision required
- R: Response rate

If the confidence level is 95% and absolute precision 5%, 95% response rate, the prevalence of the 60+ population having any health condition is 0.711 (VWU, 2012) and deff of this design is 2.2112, then the average sample for each region is:

$$n = \frac{1.96^2 * 0.711 * (1-0.711) * 2.2112}{0.05^2 * 95\%} = 735 \text{ (60+)}$$

Total sample for six ecoregions, Ha Noi, and Ho Chi Minh City will be $735 \times 8 = 5,880$ (participants 60+)

Sampling Strategies

The LSAHV sampling strategies comprised six steps:

Step 1: Sample distribution by region. To oversample the population of the 70–79 and 80+ groups compared to the 60–69 population, the square root of the total population of 60+ was calculated. This calculation would increase the samples in the regions with smaller populations.

Step 2: Sample distribution by urban and rural. We used probability proportional to size to distribute samples for rural and urban settings.

Step 3: Distribution of samples by age group. We used the square root of the population of age groups 60–69, 70–79, and 80+ to identify the distribution index for each age group. This computation will help increase the number of participants in the smaller population.

Step 4: Province selection. We used the probability proportional to size method to select provinces by region.

Step 5: Village selection. From the list of selected provinces, we used the list of villages available from the most up-to-date 2018 database of the General Statistics Office to select the villages to survey. The village list was classified into the urban and the rural lists. The probability proportional to size method was used to select the total villages for each province.

Step 6: Participant selection. We had the list of 60+ population in selected villages from the General Office for Population Family Planning's most updated database in 2018. From this list, researchers from the Institute of Population, Health and Development divided the population into the 60–69, 70–79, and 80+ subgroups. We used a web-based random calculator programme (<https://stattrek.com>) to randomly select four from the 60–69 group, three from the 70–79, and two from the 80+ group in each commune. In Ha Noi and Ho Chi Minh City, the numbers were five from the 60–69 group, three from the 70–79 group, and two from the 80+ group in each commune. The sample totalled 6,050 participants (Table A1).

Table A1. Selected Provinces and Sample Distribution

No.	Province	Region	Sample	Village	Sample in Each Village	Sample for Each Age Group		
						60–69	70–79	80+
1	Lạng Sơn	Northern Midlands and Mountains	666	74	9	4	3	2
2	Quang Ninh	Red River Delta	891	99	9	4	3	2
3	Nghe An	North Central and Central Coast	684	76	9	4	3	2
4	Quang Ngãi		306	34	9	4	3	2
5	Dak Lak	Central Highlands	414	46	9	4	3	2
6	Dong Nai	South East	540	60	9	4	3	2
7	Tra Vinh	Mekong River Delta	522	58	9	4	3	2
8	Hau Giang		387	43	9	4	3	2
9	Ha Noi	Red River Delta (Capital)	820	82	10	5	3	2
10	Ho Chi Minh City	South East (commercial centre)	820	82	10	5	3	2
TOTAL (IN VIET NAM)			6,050	654				

Weighting Calculation

Weighting is used to adjust the results of a study to bring them more in line with what is known about a population.

Design Weight

The design weights are the inverse of the probability of inclusion to the sample. Therefore, the design weight is calculated as:

$$D_Weight_final = (W_1 * W_2 * W_3)$$

Of which: W_1 : Design weight of selected province

$$W_1 = \frac{P_i}{n * Pt_i}$$

P_i : Population of region i (i=1;8)

Pt_i : Population of province t, region i.

n: Number of provinces of region i.

W_2 : Design weight of selected village

$$W_2 = \frac{p_j}{(n_j * p_{dj})}$$

p_j : Population 60+ in province j, region i

p_{dj} : Population 60+ in village d, province j

n_j : Number of villages in province j, region i

W₃: Design weight of selected participant:

$$W_3 = \frac{P_{gd}}{N_{gd} * R_d}$$

P_{gd}: Population of age group g in village d
N_g: Number of selected participants in age group g, village d
R: Response rate in village d

Adjustment Weight

An adjustment weight to each survey respondent was also calculated. The main purpose of weighting adjustments is to reduce the bias in the survey estimates that non-response and non-coverage can cause.

$$C_Weight_final = D_Weight_final * \frac{P_{c_{gi} (TT/NT)}}{P_{d_{gi} (TT/NT)}}$$

P_{c_{gi} (TT/NT)}: Population from census results for age-group g of region i
P_{d_{gi} (TT/NT)}: Population from design weight of LSAHV for age-group g of region i

References

Vietnam Women Union (VWU) (2012), *Vietnam Aging Survey (VNAS) 2011: Key Findings*. Ha Noi: Women Publishing House.

Annex B: Characteristics of Vietnamese Older Persons with Proxy Respondents

Linh Thuy Dang, Nguyen Cong Vu, and Oanh Thi Le

In the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV), proxy respondents were included. Two steps of screening were applied to determine whether to interview an older person (OP) or require a proxy. In the first screening, the potential OP would be asked to introduce a proxy to be interviewed if he or she (i) has been hospitalised, sick, or incapacitated; (ii) has difficulty hearing; (iii) has difficulty speaking; and (iv) has experienced psychological disorder. If the OP passed the first screening, he or she undergoes the second screening on cognitive assessment, using the Short Portable Mental Status Questionnaire (SPMSQ). The SPMSQ, first proposed by Pfeiffer, is a brief cognitive screening instrument comprising 10 items to test orientation to time and place, memory, and current events (Pfeiffer, 1975). The SPMSQ scores are based on the number of incorrect answers. Those with zero to two errors have intact intellectual functioning; those with three to four errors have mild intellectual impairment; those with five to seven errors have moderate intellectual impairment; and those with eight to ten errors have severe intellectual impairment. However, the scores for intellectual level vary by education of respondents. One more error is allowed in the scoring if a respondent has a grade school education or less, and one less error is allowed if the respondent has education beyond high school. Therefore, to be eligible for interview, respondents with grade school education or less should not have more than six incorrect answers. Respondents with high school education should not have more than five incorrect answers to be eligible for interview whilst less than four incorrect answers are allowed for respondents with college education or more. Because this test has not yet been validated in Viet Nam, the standard cut-off scores recommended by Pfeiffer were adopted and only OPs with normal mental functioning were eligible for interview. OPs who failed in this assessment were required proxy respondents.

The total of 696 proxy respondents included 421 from the first screening and 275 from the second screening. Proxy interviews constituted 12% of the total unweighted sample. Use of proxies may relate to biases, affecting analysis and interpretation of findings (Weir et al., 2011; Nuemann et al., 2015). Therefore, questions about beliefs, attitudes, cognitive assessment, isolation, and self-assessment were skipped for proxy interviews to reduce bias.

Amongst 6,050 OP participants in the LSAHV, 696 required a proxy during the survey. OPs’ sociodemographic characteristics by proxy status and screening type are presented in Table B1. Those who are older, female, not currently married, living in rural areas, and not working more likely needed a proxy. Those with a proxy have a mean age of 81 years compared to 72 years for those without a proxy. We also compared OPs who required a proxy in the first and second screenings. The mean age of OPs who needed a proxy in the first and second screenings are 82 and 79 years, respectively. There are significant differences in terms of age, religion, working status, and living arrangement but no difference in terms of sex, marital status, and type of residence.

Table B1. Profile of Respondents by Proxy Status and Screening Type (Unweighted Data)

Characteristics of Older Persons	Proxy Status						ALL
	Without Proxy	With Proxy	Sig	Type of Screen (With Proxy)		Sig	
				First Screen	Second Screen		
Age							
60-69	47.3	15.5		12.1	20.7		15.5
70-79	34.2	24.6	***	22.4	28.0	***	24.6
80+	18.5	59.9		65.6	51.3		59.9
Mean age	71.55	80.89	***	82.14	78.97	***	72.62
Sex							
Male	44.1	30.0	***	32.1	26.9	n.s.	30.0
Female	55.9	70.0		67.9	73.1		70.0

Characteristics of Older Persons	Proxy Status						ALL	
	Without Proxy	With Proxy	Sig	Type of Screen (With Proxy)		Sig		
				First Screen	Second Screen			
Marital status								
Current married/Living together	60.0	32.0	***	30.9	33.8	n.s.	32.0	
Other	40.0	68.0		69.1	66.2		68.0	
Religion								
None	64.8	63.1	n.s.	67.0	57.1	*	63.1	
Other	35.2	36.9		33.0	42.9		36.9	
Work Status								
Working	29.6	7.6	***	4.8	12.0	***	7.6	
Not working	70.5	92.4		95.3	88.0			92.4
Type of residence								
Urban	41.1	33.5	***	36.1	29.5	n.s.	33.5	
Rural	58.9	66.5		63.9	70.6			66.5
Living arrangement								
Living alone	8.7	4.2	***	2.4	6.9	*	4.2	
Living with spouse only	18.4	9.2		9.5	8.7			9.2
Living children	63.1	73.4		74.8	71.3			73.4
Other types of living arrangement	9.8	13.2		13.3	13.1			13.2
N	5,354	696		421	275		696	

Statistical significance, * $p < 0.05$, *** $p < 0.001$, n.s. = not significant
Source: Calculated by PHAD using original LSAHV data.

Respondents were not interviewed during the first screening because of statistically significant differences amongst age groups (Table B2). Difficulty speaking (29%) and poor cognitive or psychological condition (25%) are more common amongst the youngest cohort (60–69 years). Difficulty hearing (42%) is the biggest problem amongst the oldest cohort (80+ years) whilst hospitalised, sick, or incapacitated (33%) is the popular reason for requiring a proxy amongst those aged 70–79. Age clearly affects the need of having a proxy.

Table B2. Reasons for Having a Proxy (First Screening) by Background Characteristics (Unweighted Data)

Characteristics of Older Persons	Reasons R Cannot Be Interviewed (First Screening)				Total	Sig	N
	R has been hos- pitalised, sick, or incapacitated	R has difficulty hearing	R has difficulty speaking	R has poor cogni- tive or psycho- logical condition (memory loss, confusion, etc.)			
Age							
60-69	22.5	24.5	28.6	24.5	100.0	**	49
70-79	33.0	28.7	16.0	22.3	100.0		94
80+	27.5	42.0	10.1	20.3	100.0		276
Sex							
Male	33.3	40.0	10.4	16.3	100.0	n.s.	135
Female	25.7	35.6	15.1	23.6	100.0		284
Marital status							
Currently married/ Living together	34.9	32.6	16.3	16.3	100.0	n.s.	129
Other	25.2	39.0	12.4	23.5	100.0		290
Religion							
None	23.8	39.2	14.2	22.8	100.0	**	281
Others	37.0	32.6	12.3	18.1	100.0		138
Work Status							
Working	25.0	30.0	40.0	5.0	100.0	*	20
Not working	28.3	37.3	12.3	22.1	100.0		399
Type of residence							
Urban	35.8	31.1	10.6	22.5	100.0	*	151
Rural	23.9	40.3	15.3	20.5	100.0		268

Characteristics of Older Persons	Reasons R Cannot Be Interviewed (First Screening)				Total	Sig	N
	R has been hos- pitalised, sick, or incapacitated	R has difficulty hearing	R has difficulty speaking	R has poor cogni- tive or psycho- logical condition (memory loss, confusion, etc.)			
Living arrangement							
Living alone	0.0	30.0	10.0	60.0	100.0		10
Living with spouse only	47.5	20.0	7.5	25.0	100.0		40
Living children	27.1	40.5	14.7	17.8	100.0	**	314
Other types of living arrangement	25.5	30.9	12.7	30.9	100.0		55
TOTAL	118	155	57	89			419

Sig = Statistical significance, * p <0 .05, ** p < 0.01, n.s. = not significant
Source: Calculated by PHAD using original LSAHV data.

Participation of proxies in providing information for OPs with cognitive impairment and other poor conditions improved the representativeness of the study population in the LSAHV. However, the proxies’ responses led to lack of information regarding the attitudes, beliefs, cognitive assessment, isolation, and self-assessment of OPs. Furthermore, the proxies tended to answer ‘don’t know’ to other questions related to OPs, which may be subject to respondent biases. These issues need to be addressed whilst data is being analysed and the findings are being interpreted.

References

Nuemann, P.J., S.S. Araki, and E.M. Gutterman (2015), ‘The Use of Proxy Respondents in Studies of Older Adults: Lessons, Challenges, and Opportunities’, *Journal of American Geriatrics Society*, 48(12), pp.1646–54. doi:10.1111/j.1532-5415.2000.tb03877 (accessed 15 January 2020).

Pfeiffer, E. (1975), ‘A Short Portable Mental Status Questionnaire for the Assessment of Organic Brain Deficit in Elderly Patients’, *Journal of American Geriatrics Society*, 23(10), pp.433–41.

Weir, D., J. Faul, and K. Langa (2011), ‘Proxy Interviews and Bias in the Distribution of Cognitive Abilities due to Non-response in Longitudinal Studies: A Comparison of HRS and ELSA’, *Longitudinal Life Course Studies*, 2(2), pp.170–84. doi:10.14301/llcs.v2i2.116 (accessed 15 January 2020).

Annex C: Research Team

Principal Investigator

Nguyen Cong Vu: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Co-Principal Investigators

Yasuhiko Saito: College of Economics, Nihon University, Tokyo, Japan
Osuke Komazawa: Economic Research Institute for ASEAN and East Asia,
Jakarta, Indonesia

Research Coordinator

Linh Thuy Dang: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Research Assistant

Ngoc Thi Tran Phan: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Subject Matter Specialists

Grace T. Cruz: Population Institute, College of Social Sciences and Philosophy,
University of the Philippines (Diliman), Quezon City, Philippines
Elma P. Laguna: Population Institute, College of Social Sciences and Philosophy,
University of the Philippines (Diliman), Quezon City, Philippines
Tuo-Yu Chen: College of Public Health, Taipei Medical University, Taipei, Taiwan
Mai Thi Tran: Institute of Population, Health and Development, Ha Noi, Viet Nam
Oanh Thi Le: Institute of Population, Health and Development, Ha Noi, Viet Nam
Thuy Thi Thu Vu: Department of Population and Labor Statistics, General Statistics
Office, Ha Noi, Viet Nam

Mai Thi Thanh Nguyen: Department of Population and Labor Statistics, General
Statistics Office, Ha Noi, Viet Nam

Data Processing Team

Nguyen Cong Vu: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Linh Thuy Dang: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Ngoc Thi Tran Phan: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Editors

Nguyen Cong Vu: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Mai Thi Tran: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Linh Thuy Dang: Institute of Population, Health and Development, Ha Noi,
Viet Nam

Choy-Lye Chei: Population Research Institute, Nihon University, Tokyo,
Japan

Yasuhiko Saito: College of Economics, Nihon University,
Tokyo, Japan

Annex D: Advisory Committee

General Office for Population and Family Planning (GOPFP)

General Statistics Office of Vietnam (GSO)

Institute of Social and Medical Studies (ISMS)

Viet Nam National Institute of Mental Health

Viet Nam National Geriatric Hospital

Viet Nam National Committee on Ageing

Viet Nam Public Health Association