



Edited by

Grace T. Cruz

Christian Joy P. Cruz

Yasuhiko Saito



Ageing and Health in The Philippines

Edited by
Grace T. Cruz
Christian Joy P. Cruz
Yasuhiko Saito



Ageing and Health in The Philippines

Copyright © 2019 by Economic Research Institute for ASEAN and East Asia and Demographic Research and Development Foundation, Inc.

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

Demographic Research and Development Foundation, Inc.
2/F Palma Hall, University of the Philippines
Diliman, Quezon City
Philippines

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 and Rachmadea Aisyah
Cover design by Ranti Amelia

ISBN: 978-602-54602-2-7

Suggested citation:

Cruz, G.T., C.J.P. Cruz and Y. Saito (eds.) (2019), *Ageing and Health in the Philipines*. Jakarta: Economic Research Institute for ASEAN and East Asia (ERIA).

Foreword

Population ageing can be seen as one of the most outstanding achievements of humanity.

I am a Japanese person born in the year 1952. The demographic statistics of Japan from my birth year to the present are indicative of the substantial trends in population ageing.

According to statistics from the Government of Japan, the fertility rate in 1952 was as high as 2.98 per woman. This means that more than two million babies were born in Japan as my contemporaries. The under-five mortality rate of the same year was high at 79 per 1,000 live births, with a male life expectancy of 61.9 years.

By 2017, a mere 65 years from my birth year, the fertility rate in Japan had dropped by half to 1.43 per woman, which translates into only about 0.94 million births. Moreover, the under-five mortality rate had fallen drastically to as low as 2.6 per 1,000 live births, and the average male life expectancy had increased to 81.1 years. As a result of this demographic transition, the proportion of the people of 60 years of age or older was as high as 34% as of 1 October 2017.

Japan is an extreme example of population ageing, a trend that is also occurring worldwide. This demographic trend is a consequence of improvements in public health and progress achieved in medical science, a field in which humanity has taken great strides especially over the last one hundred years. Until a couple of centuries ago, we lost approximately one in four babies before their fifth birthdays. Population ageing has resulted in fundamental changes to our social system.

The international community has identified population ageing as a critical issue and, as a result, has taken several actions to cope with this social change. The Madrid International Plan of Action on Ageing was adopted in 2002 at the Second World Assembly on Ageing and called for ‘changes in attitudes, policies and practices’ to fulfil ‘the enormous potential of ageing’.

Statistics show that Asia has the most notable and rapid pace of population ageing, both in terms of the numbers of older people and the older population’s share of

the total population. This is also projected to become the case for ASEAN Member States. In 2015, the Heads of State/Government of ASEAN Member States adopted the Kuala Lumpur Declaration on Ageing: Empowering Older Persons in ASEAN, recognising that ‘the promotion of health, active and productive ageing’ is ‘key to the well-being of older persons as valuable members of the family, community and society’.

As an international think tank mandated to provide policy recommendations for ASEAN Member States on issues of economic integration, narrowing development gaps, and sustainable development, the Economic Research Institute for ASEAN and East Asia (ERIA) has a responsibility to assist ASEAN Member States in fulfilling this declaration.

But ERIA’s mandate is not limited to the three objectives stated above – economic integration, narrowing development gaps, and sustainable development. Due to the rapid change of society as a result of the advancement of Information and Communication Technology (ICT), it is important to promote re-skilling education for the existing workforce, particularly for older people, to allow them to catch up and upgrade their skills. Healthy ageing – through the capacity development of older people – is of key importance for the improvement of productivity in the era of population ageing. ERIA is a unique organisation that carries out research not only in the field of economics, but also in agricultural and environmental science, and population ageing is another area of research. We would like to integrate the outcome of our studies on population ageing with industrial policies designed for the era of digitalisation.

In 2017, ERIA received a contribution from the Government of Japan to promote research and come up with policy recommendations on population ageing and long-term care. This contribution was provided as one of the action items in the context of the Asia Health and Wellbeing Initiative (AHWIN) launched by the Government of Japan in 2016. Taking the concept of AHWIN into account, and making full use of ERIA’s capacity and network in ASEAN Member States, ERIA launched a number of activities to improve policymaking and thereby contribute to healthy, active, and productive ageing.

To this end, ERIA decided to conduct longitudinal studies targeting older people in ASEAN Member States in collaboration with our partner organisations. The Longitudinal Study of Ageing and Health in the Philippines (LSAHP) is one of

them and this report is the product of the baseline survey of LSAHP. It provides a comprehensive look at the realities faced by older people in the Philippines: from health status to healthcare utilisation, economic wellbeing, and care for the elderly. All information is indispensable for policymaking on healthy and active ageing.

This project is designed to become a ‘longitudinal’ study, though at this stage it reports only the initial results of the baseline survey. The next stage of the project, which will be implemented in 2020, is crucial, since it will reveal the true results of the longitudinal data – this will allow us to analyse the factors contributing to the improvement of health expectancy.

We owe the achievements of this project to the dedicated work and firm leadership of Dr. Grace T. Cruz, Chairperson of Demographic Research and Development Foundation, Inc. and a professor of the University of the Philippines Population Institute. I also wish to praise the staff of DRDF for their outstanding work on the project from fieldwork to data processing. I heard that some of the field interviewers became emotional during the interviews when they learned about the realities the elderly people face on a daily basis. That is an unexpected effect of this project, but I hope such experiences will contribute to an awareness of the issues related to population ageing in the country, and lead to the encouragement of community-based approaches as well as policymaking, which will benefit the older population.

Furthermore, I would like to express my gratitude to the members of the LSAHP Advisory Committee of this study for the valuable advice they provided. This study is an ongoing project, and your continued and further support would be greatly appreciated.

We must not forget the support of Filipino mothers, fathers, grandmothers, and grandfathers who were randomly selected as respondents for this study. The remarkable 94% response rate shows that Filipinos understand the importance of social surveys. In our study, we also interviewed the children and caregivers of the selected respondents. Their kind cooperation enabled us to perform a more comprehensive analysis of the realities of older people. Dear mums, dads, families, caregivers, and related people, without your continued cooperation, this study would not have been possible. Thank you, and we look forward to seeing you again at the time of the next survey in 2020.

Lastly, I would like to reaffirm that population ageing is a mark of the success of humanity. I believe the improvement of health expectancy is the most important target to take advantage of this opportunity. I hope the rich information in this report will be fully utilised by all stakeholders – governments, international organisations, academia, civil organisations, the private sector, etc. – for the fulfilment of our ultimate goal: healthy, active, and productive ageing.

Thank you.

A handwritten signature in black ink, reading "H. Nishimura". The signature is fluid and cursive, with the first letter 'H' being particularly large and stylized.

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



Republic of the Philippines

National Economic and Development Authority

Message

The National Economic and Development Authority (NEDA) extends its warmest congratulations to the Demographic Research and Development Foundation, Inc. (DRDF) and the Economic Research Institute for the ASEAN and East Asia (ERIA) for successfully conducting the 2018 baseline survey of the Longitudinal Study of Ageing and Health in the Philippines (LSAHP). This ground-breaking study sets the stage for the very first longitudinal study on ageing in the Philippines. It is a rich source of information, which will advance the goals of active and healthy ageing in the country.

LSAHP provides details on the various aspects of ageing as experienced by older people and their immediate kin. This wide range of data – collected from about 6,000 older people nationwide, their children, and caregivers – include information on living conditions, socio-economic status, levels and sources of income, family structures, social networks, and access to government services like social pension. All these are relevant to the monitoring of the Philippine Sustainable Development Goal (SDGs) commitments for older people.

We are confident that the findings of this longitudinal study will help guide future policies, plans, and programmes so that no older Filipino is left behind. In doing so, we remain steadfast in our vision of an inclusive and sustainable development, ensuring a 'matatag, maginhawa, at panatag na buhay para sa lahat'.

Ernesto M. Pernia
Socioeconomic Planning Secretary



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

Message

Congratulations to the Demographic Research and Development Foundation, Inc. (DRDF) and the Economic Research Institute for ASEAN and East Asia (ERIA) for undertaking the 2018 Longitudinal Study of Ageing and Health in the Philippines (LSAHP). The LSAHP provides comprehensive and much-needed information on the current health status of older Filipinos as measured through multiple indicators of health including physical, functional, mental, dental, and other dimensions.

The data from LSAHP will be a big boost to the Department of Health's goal of pushing for active and healthy ageing in the Philippines as it will provide information not just on the physical aspects of disease but on a comprehensive list of indicators that can provide a more holistic picture of the status of health of older Filipinos today. Findings from the LSAHP will better inform policies and programmes that will be crafted by the Department of Health to promote active and healthy ageing. The study is also the first to obtain data on long-term care in the country, a topic that will likely become more prominent in the future when more Filipinos live to advanced old age. The LSAHP findings shed light not only on the current health status of senior citizens but also identify the gaps in their access to and use of healthcare services and health insurance.

We look forward to using the LSAHP study findings to better understand the health-related issues that affect the older sector of our population. This first project report, Ageing in the Philippines, along with the future panel data to be collected on the same sample in successive rounds of the LSAHP will provide the types of evidence on ageing and health that will put our country on par with other countries in the region that conduct longitudinal studies on ageing and, by so doing, obtain a more comprehensive and more nuanced view of health issues with advancing age.

A handwritten signature in black ink, appearing to read "Francisco T. Duque III".

Francisco T. Duque III, MD Msc
Health Secretary

Contents

Acknowledgements		xi
List of Tables		xiii
List of Figures		xvii
List of Acronyms		xviii
Executive Summary		xx
Chapter 1	Background	1
	<i>Grace T. Cruz</i>	
Chapter 2	The 2018 Longitudinal Study of Ageing and Health in the Philippines	13
	<i>Grace T. Cruz, Yasuhiko Saito, Christian Joy P. Cruz, and Mark Ryan B. Paguirigan</i>	
Chapter 3	Filipino Older Persons	27
	<i>Christian Joy P. Cruz and Grace T. Cruz</i>	
Chapter 4	Health Status	47
	<i>Josefina N. Natividad</i>	
Chapter 5	Functional Health	75
	<i>Grace T. Cruz and Yasuhiko Saito</i>	
Chapter 6	Healthcare and Healthcare Utilisation	89
	<i>Josefina N. Natividad</i>	
Chapter 7	Economic Well-being	105
	<i>Christian Joy P. Cruz</i>	
Chapter 8	Generativity, Attitudes, and Beliefs	117
	<i>Grace T. Cruz and Maria Karlene Shawn I. Cabaraban</i>	
Chapter 9	Activities, Social Isolation, and Information Technology	129
	<i>Nimfa B. Ogena</i>	
Chapter 10	Services for the Older Persons	149
	<i>Mark Ryan B. Paguirigan</i>	

Chapter 11	Family Support and Intergenerational Exchanges	161
	<i>Maria Paz N. Marquez</i>	
Chapter 12	Caring for Older Persons	173
	<i>Elma P. Laguna</i>	
Chapter 13	Children of Older Persons	193
	<i>Maria Karlene Shawn I. Cabaraban, Mark Ryan B. Paguirigan, and Grace T. Cruz</i>	
Chapter 14	Discussion, Conclusions, and Recommendations	215
	<i>Grace T. Cruz, Josefina N. Natividad, and Yasuhiko Saito</i>	
Annex A	LSAHP Sampling Design and Weights	227
	<i>Erniel B. Barrios and Maria Paz N. Marquez</i>	
Annex B	Characteristics of Filipino Older Persons with Proxy Respondents	235
	<i>Christian Joy P. Cruz and Grace T. Cruz</i>	
Annex C	Research Team and Field Personnel	242
Annex D	Advisory Committee	244

Acknowledgements

This report, Ageing and Health in the Philippines, using the baseline data of the 2018 Philippine Longitudinal Study of Aging and Health in the Philippines (LSAHP), provides the latest nationally representative evidence on ageing in the Philippines. The LSAHP, which is part of a two-country study on the Philippines and Viet Nam, would not have been possible without the funding support of the Economic Research Institute for ASEAN and East Asia. We are particularly grateful to Dr. Osuke Komazawa and Mr. Sota Machida for efficiently coordinating the project from its inception to the writing of this report. We also extend our gratitude to the Demographic Research and Development Foundation, Inc., the LSAHP project implementer.

The project was conceived at an initial meeting with Undersecretary Juan Antonio Perez III, Executive Director of the Commission on Population and Development, and his associate, Ms. Lyra Gay Ellies S. Borja, in November 2017. We owe them a debt of gratitude for enabling this research in the Philippine setting. We are also indebted to the following subject matter specialists for providing their expert advice: Dr. Josefina N. Natividad, Dr. Nimfa B. Ogena, Dr. Elma P. Laguna, and Dr. Shelley Ann Dela Vega. Associate Professor Maria Paz N. Marquez and Dr. Erniel Barrios also deserve recognition for their statistical and technical expertise in data processing and sampling design, which was valuable in the completion of this project.

We are most grateful to the following members of the LSAHP advisory committee for their guidance and support at critical points of the project's implementation: the Department of Health, National Economic and Development Authority, Department of Social Welfare and Development, Institute on Aging – National Institutes of Health, University of the Philippines Population Institute, Commission on Population and Development, Philippine Statistics Authority, United Nations Population Fund – Philippines, Asian Development Bank, Philippine Health Insurance Corporation, Social Security System, Government Service Insurance System, Coalition of Services for the Elderly, and the University of the Philippines Diliman – Department of Psychology.

We commend the local government units of the LSAHP study areas for their help in facilitating the data collection, particularly in the geographically isolated and hard-to-reach barangays. Special credit goes to the Department of Health for providing us with an endorsement that facilitated the entry of our research teams to the study areas. We are deeply indebted to the data collection team, including the field supervisors and field interviewers, for their hard work, commitment, and sacrifices in collecting the baseline data.

This report is dedicated to all the LSAHP participants: the Filipino older people, and their caregivers and adult children, who gladly shared their time and life stories. Their contribution is invaluable, and it is our hope that it will be put to good use when the appropriate agencies decide on future policies and programmes that will ensure active and healthy ageing in the Philippines.

List of Tables

Table 1.1	Countries with longitudinal surveys on ageing: ASEAN, China, India, Japan and Republic of Korea	6
Table 2.1	Number of respondents per questionnaire	21
Table 3.1	Household and Housing Characteristics	29
Table 3.2	Percent Distribution of Older persons by Sex and Age	33
Table 3.3	Sociodemographic Profile of Older Persons by Sex and Age	35
Table 3.4	Living Arrangement and Residential History by Sex and Age	37
Table 3.5	Characteristics of Parents and Siblings by Sex and Age	38
Table 3.6	Characteristics of Spouse by Sex and Age	39
Table 3.7	Children of Older Persons by Sex and Age	40
Table 3.8	Grandchildren of Older Persons by Sex and Age	42
Table 4.1	Self-assessed Health by Sex and Age	49
Table 4.2	Diagnosed Illnesses by Sex and Age	50
Table 4.3	Experience of Heart attack by Sex and Age	51
Table 4.4	Oral Health by Sex and Age	53
Table 4.5	Sleeping Habits by Sex and Age	55
Table 4.6	Experience of Pain by Sex and Age	57
Table 4.7	History of Falls by Sex and Age	59
Table 4.8	Incontinence by Sex and Age	61
Table 4.9	Mean Depressive Scores of Older Filipinos by Sex and Age	62
Table 4.10	Smoking by Sex and Age	63
Table 4.11	Drinking by Sex and Age	64
Table 4.12	Objective Measures of Health by Sex and Age	65
Table 5.1	Activities of Daily Living (ADLs) by Sex and Age	79
Table 5.2	Instrumental Activities of Daily Living (IADLs) by Sex and Age	80
Table 5.3	Washington Group Short Set on Functioning by Sex and Age	81
Table 5.4	Global Activity Limitation Index (GALI) by Sex and Age	83
Table 5.5	Experience of being Bedridden by Sex and Age	83

Table 5.6	Nagi Functioning Measures by Sex and Age	84
Table 6.1	Inpatient Utilisation by Sex and Age	90
Table 6.2	Outpatient Utilisation by Sex and Age	92
Table 6.3	Unmet Need for Healthcare by Sex and Age	93
Table 6.4	Health Insurance Coverage by Sex and Age	93
Table 6.5	Vaccinations by Sex and Age	94
Table 6.6	Level of Use and Source of Medicines and Supplements by Sex and Age	96
Table 6.7	Person Who Usually Takes Care of Older Person When He/She is Sick Since Age 60 by Sex and Age	97
Table 6.8	Long-term Care by Sex and Age	98
Table 7.1	Sources of Income and Median Monthly Income by Sex and Age	106
Table 7.2	Most Important Source of Income by Sex and Age	109
Table 7.3	Assets and Liabilities by Sex and Age	110
Table 7.4	Sufficiency of Household Income by Sex and Age	112
Table 7.5	Self-assessed Economic Wellbeing Whilst Growing Up by Sex and Age	113
Table 8.1	Generativity by Sex and Age	120
Table 8.2	Attitudes and Beliefs by Sex and Age	123
Table 9.1	Activities by Sex and Age	130
Table 9.2	Religious Activities by Sex and Age	131
Table 9.3	Memberships in Organizations by Sex and Age	133
Table 9.4	Loneliness of Older Persons by Sex and Age	135
Table 9.5	Social Isolation from Relatives Not Coresiding with Older Person by Sex and Age	137
Table 9.6	Social Isolation from Friends by Sex and Age	138
Table 9.7	Life Satisfaction by Sex and Age	141
Table 9.8	Use of Information Technology by Sex and Age	143
Table 10.1	Awareness and Use of Services by Sex and Age	151
Table 10.2	Attitudes Towards Homes for the Aged by Sex and Age	155

Table 11.1	Social Contact between Older Persons to Non-co-resident Children in the Past 12 Months by Sex and Age	162
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	163
Table 11.3	Assistance Received by the Older Persons from Co-resident and non-co-resident Children in the Past 12 Months by Sex and Age	164
Table 11.4	Exchange of Financial Support Between Older Persons and Children, by Sex and Age	167
Table 11.5	Attitudes Toward Family Support of Older Persons by Sex and Age	168
Table 12.1	Type of Caregiver by Sex and Age of Older Person	174
Table 12.2	Characteristics of Primary Caregivers of Older Person	178
Table 12.3	Relationship and Living Arrangement of Primary Caregiver to and with Older Person by Sex and Age	180
Table 12.4	Self-Assessed Health of Primary Caregiver of Older Persons by Sex and Age	181
Table 12.5	Primary Caregiver's Perception on Older Person's ADL Difficulty by Sex and Age	182
Table 12.6	Primary Caregiver's Perception of the Need for Assistance of Older Person with ADL Difficulty by Sex and Age of Older Person	182
Table 12.7	Assistance Older Persons for Various Activities of Daily Life by Sex and Age of Older Person	183
Table 12.8	Difficulty in Caring for Older Person by Sex and Age of Older Person	184
Table 12.9	Situation as a Primary Caregiver by Sex and Age of Older Person	185
Table 12.10	Characteristics of Potential Caregivers by Sex and Age of Older Person	187
Table 12.11	Relationship of Potential Caregiver to Older Person by Sex and Age of Older Person	188
Table 12.12	Self-Assessed Health of Potential Caregivers of Older Persons and their Willingness to Assume the Caregiver Responsibility by Sex and Age	188
Table 13.1	Characteristics of Children	196

Table 13.2	Relationship to Older Persons by Sex and Age of Older Person	198
Table 13.3	Support Given to Older Persons by Sex and Age of Older Person	201
Table 13.4	Support Received from Older Person by Sex and Age of Older Person	203
Table 13.5	Perception of Children on the Health Status of Older Persons by Sex and Age of Older Person	206
Table 13.6	Perception of Children on the Cognitive Decline of Older Persons by Sex and Age of Older Person	207
Table 13.7	Attitudes and Beliefs of Children by Sex and Age of Older Person	209
Table A.1	List of Sample Areas and their Corresponding Number of Sample Barangays and Sample Size	228
Table B.1	Profile of Respondents by Proxy Status and Screening Type (Unweighted Data)	237
Table B.2	Reasons for Having a Proxy (First Screening) by Background Characteristics (Unweighted Data)	239

List of Figures

Figure 2.1.	Conceptual Model of Health States and Health Transitions According to the Disablement Process	15
Figure 2.2.	Conceptual Framework for Factors Related to Health Outcome	18
Figure 2.3.	Map of the 2018 Longitudinal Study of Ageing and Health in the Philippines Sample Area	19
Figure 2.4.	Study sample	21
Figure 3.1.	Status of Ageing: Philippines, Singapore, and Japan, 1950–2045	28
Figure 4.1	Mean Number of Natural Teeth by Sex and Age	52
Figure 4.2	Older Persons Often Troubled with Pain, by Sex and Age (%)	58
Figure 5.1	Functional Difficulty of Older Persons by Sex	85
Figure 5.2	Functional Difficulty of Older Persons by Age	85
Figure 6.1	Distribution of Main Caregiver of Older Persons Currently Under Long-term Care by Age and Sex	101
Figure 7.1	Self-assessed Economic Wellbeing by Sex and Age	111
Figure 8.1	Best Living Arrangement of Older Persons by Sex and Age	124
Figure 9.1	Percent of Older Filipinos Who Said Religion is Very Important in Their Lives by Sex and Age	132
Figure 9.2	Current Life Satisfaction by Sex and Age	141
Figure 10.1	Use of Privileges by Sex	153
Figure 10.2	Use of Privileges by Age	153
Figure 11.1	Exchange of Assistance between Older Person and coresident children	166
Figure 11.2	Exchange of Assistance and Social Contact between Older Person and Non-co-resident Children	166
Figure 12.1	Percent Distribution of Primary and Potential Caregivers by Sex and Age	177
Figure 12.2	Relationship of Primary Caregivers to Older Persons, Sex and Age	179
Figure 13.1	Living Arrangement with Older Person by Sex and Age	197
Figure 13.2	Perception of Children on the Health Status of Older Person by Sex and Age	205

List of Acronyms

4Ps	Pantawid Pamilya Pilipino Program
ADL	Activities of Daily Living
ASEAN	Association of Southeast Asian Nations
BMI	Body Mass Index
CAPI	Computer-Assisted Personal Interviews
CCT	Conditional Cash Transfer programme
CES-D	Center for Epidemiological Studies - Depression Scale
CPH	Census of Population and Housing
CYS	Credited Years of Service
DOH	Department of Health
DRDF	Demographic Research and Development Foundation, Inc.
DSWD	Department of Social Welfare and Development
ERIA	Economic Research Institute for ASEAN and East Asia
EU	European Union
GALI	Global Activity Limitation Indicator
GSIS	Government Service Insurance System
HLY	Healthy Life Years
IADL	Instrumental Activities of Daily Living
ICF	International Classification of Functioning, Disability and Health
IT	Information Technology
LGS	Loyola Generativity Scale
LGU	Local Government Unit
LSAHP	Longitudinal Study of Ageing in the Philippines
LSNS	Lubben Social Network Scale
LTC	Long Term Care
NGO	Non-Government Organisations
OFW	Overseas Filipino Worker
OP	Older Person
PES	Philippine Elderly Survey

PhilHealth	Philippine Health Insurance System
PSA	Philippine Statistics Authority
PSOA	Philippine Study on Aging
PSU	Primary Sampling Unit
SDGs	Sustainable Development Goals
SPMSQ	Short Portable Mental State Questionnaire
SRH	Self-Rated Health
SSS	Social Security System
SWDA	Social Welfare and Development Agency
TRAIN	Tax Reform for Acceleration and Inclusion
UN	United Nations
UNDESA	United Nations, Department of Economic and Social Affairs
VAT	Value-Added Tax
WGSS	Washington Group Short Set on Functioning
WHO	World Health Organization

Executive Summary

The 2018 Longitudinal Study of Ageing and Health in the Philippines (LSAHP) is the first nationally representative longitudinal study of ageing to be conducted in the Philippines. It is designed to (1) investigate the health status and well-being, as well as their correlates, of Filipinos aged 60 years and over; and (2) assess the determinants of health status and transitions in health status and overall well-being. The LSAHP is part of a comparative study of the Philippines and Viet Nam. It is funded by the Economic Research Institute for ASEAN and East Asia and implemented by the Demographic Research and Development Foundation, Inc.

The baseline survey covered 5,985 older persons (OPs), aged 60 years and over, and had a response rate of 94%. The survey employed a multistage sampling design, with provinces as the primary sampling units, barangays as the secondary sampling units, and OPs as the ultimate sampling units. The survey was conducted from October 2018 to February 2019. Follow-up interviews will be conducted after 2 years. Computer-assisted personal interviews using tablets were conducted for the survey.

This report provides an updated profile of older Filipinos, focusing on their health and well-being, as well as on their caregivers and adult children. The analysis focuses on outcome indicators of various dimensions of health and well-being, categorised by age and sex of OP respondents.

Filipino Older Persons

Female OPs have the numeric advantage, constituting 60% of the total OP population. The mean age is 69 years, with males registering an average of 68 and females 70 years. More male OPs are currently married (63%) or living in (6%), whilst most female OPs are widowed (56%). Most older Filipinos attained at most an elementary education (66%), but the age pattern for those who reached high school indicates an improving educational profile, from 18% amongst those aged 80+ to 31% amongst those aged 60–69.

The majority (60%) of OPs co-reside with at least one child, and a great majority (75%) have been living in their current residence for at least 5 years. An

overwhelming majority (79%), more so amongst males and the older cohort, prefer to live in the countryside.

Only 8% of OPs have either a surviving father or mother, and an insignificant proportion (0.4%) have both surviving parents. Nearly all older Filipinos have children (95%), with an average of six children ever born. Two in five OPs reported having lost at least one child to death. Five percent of OPs have adopted children or stepchildren, each such OP having an average of 2.6 adopted children or stepchildren. Almost all OPs (96%) reported having at least one grandchild. On average, they became grandparents at about 48 years old. About 24% are fully or partially in charge of the care of any of their grandchildren, significantly more so amongst older females than males (27% vs. 19%).

Self-assessed Health

Most older Filipinos have average self-rated health (48%). Overall, females have better self-rated health than males, with the level declining with advancing age. OPs have a more positive assessment of their health whilst growing up, with 68% claiming to have been very healthy and 23% reporting having been healthier than average.

Diagnosed Illnesses

Illnesses diagnosed by a physician were grouped into two: those that are not life-threatening and are recognisable to the OP even without a medical diagnosis (group 1) and those that require a medical diagnosis (group 2). The prevalence of group-1 diseases is generally low. The most commonly cited are arthritis (18%) and cataracts (17%). Of the group-2 diseases, hypertension has the highest prevalence (46%). Diabetes, angina and/or myocardial infarction, and renal and/or urinary ailments are the next highest, all below 13%. For both groups, the most prevalent illnesses are more evident amongst older females, with no discernible pattern by age.

About 4% of OPs have had a heart attack, experienced at an average age of 63 years for males and 59 years for females. Amongst these OPs, only half were taking medication for their heart condition at the time of the survey, with the proportion highest amongst those aged 80+ (67%).

Oral Health

The state of oral health of older Filipinos is poor, based on the criteria of 9 original teeth retained, with males having significantly more (11) than females (8). The mean decreases with age, from 11 amongst those aged 60–69 to 5 amongst those aged 80+. In all, 28% of older Filipinos are completely edentulous or have no remaining original teeth; the proportion is higher amongst females (35%) than males (17%) and increases monotonically with age. Close to half (47%) of those in their 80s have no remaining original teeth. About 3 in 10 older Filipinos reported having dentures.

Sleep, Pain, Falls, and Incontinence

Older Filipinos reported an average sleep duration of 6 hours, with about 8 in 10 satisfied with their sleep.

One in three (33%) older Filipinos reported that they are often troubled with pain, with no apparent gender difference. More than half (58%) of those who are troubled with pain suffer from moderate pain, whilst a tenth reported severe pain.

Nineteen percent had experienced a fall in the last 12 months, with an average of 1.7 falls during that period. The average frequency of falls increases with age. The oldest cohort reported an average of two falls in the 12-month period. Of those who had had a fall, 15% reported being injured seriously enough to need medical treatment.

Incontinence is not prevalent. More than 8 in 10 older Filipinos reported no loss of control of either bladder or bowel movement.

Depressive Symptoms

Depressive symptoms were measured using the 11-item version of the Center for Epidemiologic Studies Depression scale. Results show that older Filipinos have an average score of 5 (the total possible score is 22); the average score is significantly higher amongst females and highest amongst the oldest age group (6).

Health Risk Behaviours

An estimated 17% of older Filipinos are current smokers, whilst 32% are former smokers. Current smoking is higher amongst males (30%) than females (9%). The prevalence of current smoking is lowest amongst those aged 80+ (11%). Overall, 29% of older Filipinos reported currently drinking. As with smoking, current drinking is much higher amongst males (49%) than females (15%). There is a steep age-related decline in the prevalence of current drinking.

Antropometric Measures

More than half (56%) of older Filipinos fall within the normal body mass index (BMI) range (18.5 to <25) set by the World Health Organization (WHO), with a significantly higher proportion for males (64%) than females (50%). The proportions at either end of the range are both low, although there are more underweight (14%) than obese older Filipinos (8%). One of the simplest measures of excess body fat is waist circumference. The WHO-recommended cut-off for obesity is a waist circumference equal to or higher than 102 cm (40 inches) for males and 88 cm (34.5 inches) for females. Using these cut-offs, 7% of males and 55% of females are obese. Measures of grip strength show that older Filipinos, on average, have weaker grip strength than their counterparts in Japan, Singapore, and Hong Kong.

Functional Health

More than a fifth (22%) of OPs have difficulty performing at least one of the seven activities of daily living (ADL). About one in four admitted difficulty performing at least one instrumental activity of daily living (IADL). Generally, functional difficulty is higher amongst females than males. Amongst the ADL, OPs find it most difficult to leave the house. Amongst the seven IADL, the use of transportation to leave home is by far the most difficult, regardless of age and sex.

The Washington Group Short Set of Questions on Disability – a measure of functional difficulty – indicates that about 7 in 10 OPs have at least one difficulty amongst the six items. OPs recorded the highest difficulty in remembering or concentrating, with males experiencing greater difficulty than females.

The Global Activity Limitation Index, which measures long-standing activity limitations in a broad range of activities in the 6 months or more prior to the

survey, show that the proportion reporting severe limitation increases dramatically with age. Another measure that captures extreme disability is bed disability. Results show at least 2% of respondents were bedridden within 2 weeks before the survey, with no gender difference. The prevalence of this condition increases significantly with age from 2% amongst those in their 60s to 8% amongst those in the oldest age group.

Of the 10 items in the Nagi measures, OPs found the following tasks the most difficult to perform: standing without sitting for 2 hours, lifting 10- and 5-kilogram objects, climbing 10 steps without resting, and walking 200–300 metres. Generally, there is a clear gender and age disparity, with the females and the older cohort reporting higher levels of difficulty than other respondents did.

Formal Care and Unmet Need for Health Service

Fifteen percent of all OPs availed themselves of inpatient care in the past 12 months, with the proportion increasing with age. Those who utilised inpatient health services were confined an average of 1.8 times in the past year; the average is higher for men and increases with age. Nearly half (49%) of OPs said their children paid for most of the cost of their hospitalisation. About 90% of those who were hospitalised were able to avail themselves of benefits from PhilHealth, the national health insurance system, either as members (83%) or as dependents of members (6%).

More OPs utilised outpatient rather than inpatient care. About 4 in 10 reported receiving medical care for an illness or accident in the past 12 months without staying overnight in a medical facility; the proportion is slightly higher amongst females (44%) than males (39%). In 9 out of 10 cases, those who received outpatient care saw a physician for most of their health problems.

About 3 in 10 OPs felt ill in the past 12 months and thought of going to the doctor but did not. Whilst there are many reasons for not seeking help at that time, the most common one is the lack of financial means. This is indicative of an unmet need for medical attention. In all, one in five OPs have an unmet need for medical care because of financial reasons.

Health Insurance, Vaccination, and Medicines

Eighty percent of older Filipinos have health insurance coverage, nearly all (98%) under PhilHealth. There is no marked difference in health insurance coverage by sex, but the proportion of OPs with health insurance increases with age.

Four in ten older Filipinos are aware of the pneumococcal vaccine, whilst 30% are aware of the flu vaccine. Of those who are aware, about half (53%) have had a pneumococcal vaccination and a little over a third (36%) have had a flu vaccination since they turned 60. The barangay health station is the most common health facility where both vaccinations were received. About 7 in 10 OPs diagnosed with hypertension are taking medications; amongst them, a third received their free medications from the health centre. Amongst the diagnosed diabetics, 68% are taking medications. Unlike hypertensives, only 18% of diabetics receive their free medicine from the health centre all the time. Thirty-eight percent of OPs reported taking any supplement, with a higher proportion amongst females (44%) than males (34%).

Informal Care and Long-term Care

The spouse is most commonly cited as taking care of the respondent when he or she is sick. About 6 in 10 males reported their spouse as their major caregiver, whilst 38% of females reported a daughter.

About 8% of OPs are receiving care because of a continuing health condition and are thus classifiable as receiving long-term care (LTC). Practically all (over 92%) require daily care. The spouse and daughter are most commonly reported as providing LTC for male OPs, and a daughter for female OPs. When asked from whom they would prefer to receive care should they develop dementia or be bedridden or become invalid, OPs most frequently cited a daughter, the spouse, and a son. Evidently, for OPs, LTC provision remains a female-dominated family responsibility.

Economic Well-being

Older Filipinos have generally poor overall economic well-being. The three most commonly cited income sources are children within the country (58%), pension (42%), and earnings from work (34%). Nearly one in four older Filipinos (23%) mentioned receiving income from their farm (i.e. products). Fifteen percent

reported money from children abroad as a source of income. On average, OPs have about two sources of income. Their median monthly income is PHP3,000 (~US\$59 assuming an exchange rate of PHP51). Reliance on pension remains low, at 42%.

Nearly all OPs have at least one asset, with the proportion declining with advancing age. The most widely held nonfinancial assets are the house the OP resides in (85%), appliances (56%), and farms and/or fishponds (19%). Ownership of real estate – a house and/or lot other than their current place of residence – was reported by 15% of OPs. About 13% have cash and 5% have bank savings.

Nearly one in four OPs (22%) reported having liabilities, the most common being loans from moneylenders such as pawnshops, credit unions, and cooperatives (43%), followed by personal loans (22%).

Considering their total household income and expenditures, 4% said they had enough money with some left over, 38% had just enough for them to pay expenses with no difficulty, 43% reported some difficulty in meeting household expenses, and 14% said they had considerable difficulty in meeting expenses. About half of OPs (49%) grew up in what they considered poor families.

Generativity, Attitudes, and Beliefs

The study explored generativity by looking at how OPs invest their time and resources, focusing on those that have greater meaning and purpose in their lives. Using the Loyola Generativity Scale, results show that OPs scored themselves highest on being needed by other people and having a good influence on the lives of others. They also feel that many people rely on them for advice, and they are keen on teaching or imparting knowledge to other people. However, they do not think they have important skills to pass along. At least 27% think that others would never say they (the OPs) have made valuable contributions to the larger society.

Most older Filipinos continue to espouse traditional beliefs pertaining to family dynamics, gender roles, and age-appropriate behaviour, such as falling in love and getting married at older ages. There is an overwhelming belief that children are obligated to support and take responsibility for their ageing parents, and there is a strong preference for co-residence with a daughter.

Older Filipinos have an overwhelming preference for independent living, although some said they would like to live near any of their children. Older males exhibited

the greatest desire for independent living (71%); amongst them, 48% want to live alone but near any child.

Leisure Activities, Religiosity, and Volunteerism

OPs generally engage in sedentary leisure activities such as watching TV (66%), whilst others engage in physical exercise (52%) and gardening (27%). About one in three attends social activities at least once a month. The majority (76%) attend religious services outside the home. Three in four OPs consider religion very important in their lives.

Slightly more than 3 in 10 OPs are members of nonreligious organizations, most commonly organizations of retired OPs and business, professional, or farm associations. Fourteen percent of OPs are engaged in volunteer work, either in church or the community; this is more common amongst females and younger cohorts.

Loneliness, Social Isolation, and Life Satisfaction

Loneliness amongst older Filipinos is relatively uncommon. The majority of OPs (75%) rarely or never feel a lack of companionship. About 10% of OPs said they always or fairly often feel the need for more companionship, 7% of OPs said they always or fairly often feel left out in various situations, and 6% of OPs feel they are always or fairly often isolated from others.

The LSAHP used the Lubben Social Network Scale to assess social isolation; results show that 27% of OPs have marginal ties with family and friends. This means that nearly 3 in 10 OPs each have fewer than two relatives or friends to perform social integration functions.

A great majority of older Filipinos are satisfied with their lives; 48% of OPs are very satisfied and 46% are somewhat satisfied. Only 6% are unsatisfied. Life satisfaction is not significantly different across sex and age.

Use of Information Technology

The use of information technology (IT) amongst older Filipinos is low. About 3 in 10 OPs own cell phones, 3% own a tablet, and 1% own a laptop. The top five mentioned uses of IT gadgets are for calling friends and family (94%), chatting

and messaging (22%), voice or video calls (18%), sending or receiving email (18%), and watching movies and TV shows and listening to music (16%).

Services for Older People

Older Filipinos have a high level of awareness about government programmes that provide privileges to senior citizens (92%). The most common privileges enjoyed by OPs are discounts on transportation, restaurants, and recreational services (77%), followed by discounts on the purchase of medicine (67%) and free medical and dental services in government health facilities (49%). Nearly half (47%) of OPs receive the PHP500 monthly social pension.

Findings reveal a greater predisposition towards institutional living (81%), particularly amongst male OPs and those in the younger cohort. Most think that living in a home for the aged is beneficial for OPs who do not have anyone to attend to them (77%) and that the OPs' health would be better cared for under such a setup (35%).

Family Support and Intergenerational Exchanges

Older Filipinos are highly involved in various forms of exchange of support with their children. Nearly 6 in 10 OPs visited any of their non-co-resident children in the 12 months before the survey, whilst 74% were visited by a non-co-resident child. About 3 in 10 (29%) of OPs contacted their non-co-resident children through letters, telephone calls, or text messages in the past year, whilst 43% received such contact from their children.

Nearly half of OPs provided financial assistance whilst 52% gave material support to any of their co-resident children. Few OPs (3%) provided instrumental support but many (88%) extended emotional support to children living with them.

The majority of OPs received monetary and material assistance from their children in the 12 months prior to the survey, regardless of residence. A much lower proportion received instrumental support (8% from co-resident children and 3% from non-co-resident children). Amongst all types of support received by OPs, emotional support predominates (79% from co-resident and 74% from non-co-resident children).

Overall, OPs are satisfied with the level of contact they have with their children. A considerable proportion (36%) intend to rely on their children for financial support in the future.

Potential and Primary Caregivers

An overwhelming majority (93%) of OPs do not have a primary caregiver but identified a potential caregiver in case they need one in the future. Only 7% of OPs have a primary caregiver; the proportion is slightly higher amongst older females than males (7% vs. 6%) and amongst those aged 80 and over (26%).

Only 13% of all primary caregivers are males. The mean age is 46.2 years for female caregivers and 59.5 years for male caregivers. Of the caregivers, 60% are married and 44% have reached at least high school level. More than a third of caregivers are working whilst 42% have stopped working completely. Only 5% received training in caregiving. Daughters make up the bulk of primary caregivers (40%), followed by spouses (29%) and daughters-in-law (9%). About 8 in 10 (83%) caregivers co-reside with the OP. Non-co-resident caregivers are likely to be living next door to the OP or in the same barangay as the OP. Half of the caregivers reported being of average health.

Based on the caregivers' assessment, 86% of OPs have had difficulty performing at least one ADL. Caregivers are more involved in assisting OPs with household tasks than with personal care. Of the caregivers, 42% said they volunteered for the job whilst 38% said they were the only ones available to do it. The majority of caregivers (78%) find satisfaction in performing their care tasks.

Almost a third of potential caregivers are males (29%) – more than double the percentage of male primary caregivers (13%). However, female caregivers are the preferred potential caregivers of both male and female OPs. Potential caregivers are younger than primary caregivers, with a mean age of 43. The majority of potential caregivers are currently married (66%) and have at least a high school education (43%). More than half are currently working (55%) and 61% are residing in rural areas.

OPs are likely to rely on family members to be their potential caregivers. Daughters account for a third of caregivers mentioned by OPs (32%), followed by spouses (31%) and sons (15%). The majority of reported potential caregivers (64%) live with the OPs. About one in five lives in the same barangay whilst 15% live next door. Close to half (43%) of the potential caregivers said the OPs are

of average health, and a slightly higher proportion said they were healthier than average or very healthy at the moment.

Adult Children of Older Persons

Data were collected from 3,573 adult-child respondents. The information from adult children supports the finding that OPs are most likely to live with an adult child. Adult children have very good relationships with their parents; only 5% said they do not or rarely get along well with their parents. Results show a mutual albeit unequal exchange of support, with more support coming from children than from parents. Older females receive more support than older males.

The majority of adult children reported that their parents are still functional. More than a quarter (27%) of adult children said their parents are still functional and healthy, and more than half (57%) said their parents can still do things on their own despite having medical conditions.

Adult children reported that their mothers deteriorated more than their fathers in the past 2 years. Adult children have a universally positive opinion of children's obligation to take care of ageing parents (99%), whilst 86% agreed that it is the parents' duty to do their best for their children even at the expense of their own well-being. About 68% of adult children agree with the traditional division of labour, and 70% agree that living with a daughter is more suitable for ageing parents than living with a son.

Conclusion

The foregoing baseline LSAHP study findings provide updated and comprehensive, nationally representative findings on the health, economic, and overall well-being of Filipinos 60 years and over, which will enhance evidence-based planning for older people. This is important as we face the emerging demographic reality of ageing, which will mean an expected increase in the number of older Filipinos who will require more interventions in health and social security, pension schemes, elderly infrastructure such as old-age homes and geriatric clinics.

Introduction

Grace T. Cruz

The 2030 Agenda for Sustainable Development sets out a universal plan of action that seeks to ensure development for all segments of society, with a focus on the most vulnerable, including older persons (OPs) (UNDESA Population Division, 2015). This coincides with other 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). Recently, the 20th Association of Southeast Asian Nations (ASEAN) Plus Three Statement on Active Ageing (ASEAN, 2016) reaffirmed member countries' commitment to active ageing, with the aim of developing a regional plan of action to implement the Kuala Lumpur Declaration on Ageing: Empowering Older Persons in the ASEAN (ASEAN, 2015).

These policies are in response to the challenges of an unprecedented global ageing trend resulting from the decline in fertility and mortality rates in many countries. Further fertility transitions in countries that still have relatively high fertility levels will ensure that the population ageing momentum will be sustained. Such a demographic revolution, accompanied by an epidemiologic transition marked by an increasing preponderance of noncommunicable illnesses resulting from further extensions in life expectancies, can seriously undermine a country's social and economic development. These transitions impose a heavy burden on individuals, families, and governments, particularly with respect to ensuring the OPs' healthcare, social security, housing, retirement benefits, and employment, amongst others. The situation becomes even more acute in less developed economies such as the Philippines, which face this demographic phenomenon with limited resources.

Because of its young population structure, the Philippines is not yet considered an ageing society. As of the last census, in 2015, a third of the country's population was below 15 years old, with merely 8% aged 60 years and over. As we anticipate further improvements in longevity and a sustained fertility decline, the demographic landscape is projected to slowly transition to an ageing population. From 2025 to 2030, older Filipinos aged 60 years and over are projected to account for at least 10% of the total population, making the Philippines an ageing society based on the United Nations (UN) definition.¹ The older population is the fastest-growing sector of the Philippine population, with the trend expected to hold. This demographic eventuality provides an opportune time to invest in ageing research, which is a prerequisite for anticipatory policies and programmes that will ensure the fulfilment of the country's 2030 Agenda pledge to leave no one behind.

The government has made significant advances in policy and programme initiatives that guarantee the rights of OPs. The most comprehensive law by far providing entitlements for older Filipinos and prescribing the government's duties and obligations is the Expanded Senior Citizens Act of 2010 (Republic Act [RA] 9994)² (Dumpit, 2019). The law entitles senior citizens to a 20% discount on the purchase of medicines, food, and other expenditure items; it also exempts them from paying value-added tax (VAT). In fulfilment of the law, the Department of Health (DOH) has allotted funds to set up geriatric health facilities in selected DOH hospitals and to build the capability of medical and nursing staff in the proposed geriatric centres (DOH Department Order No. 2018-0357, 2018).

Another milestone was attained with the passing in July 2019 of RA 11350, which created the National Commission of Senior Citizens. The commission will ensure the full implementation of laws, policies, and government programmes pertaining to senior citizens and formulate policies to promote and protect the rights and well-being of senior citizens, amongst others.

Another new law is the Universal Health Care Law (RA 11223), which guarantees equitable access to quality and affordable healthcare services for all Filipinos,

¹ The UN defines ageing societies as those with 10%–19% of the population aged 60 and over (UNDESA Population Division, 2015).

² RA 9994 is the third version of the Senior Citizens Act. It aims to augment existing programmes and services for older people.

including OPs. The law automatically enrolls all Filipino citizens in the National Health Insurance Program and expands Philippine Health Insurance System (PhilHealth) coverage to include free medical consultations and laboratory tests. If properly implemented, the new law is expected to improve older Filipinos' access to healthcare, especially in rural and other medically underserved areas. Related to this is the provision of the Tax Reform for Acceleration and Inclusion (TRAIN) Law of 2017 (RA 10963) that extends VAT exemption to medications for diabetes, high cholesterol, and hypertension – the three most common maladies of OPs – beginning in January 2019 (TRAIN Law, 2017).

The Plan of Action for Senior Citizens has been crafted, with the Department of Social Welfare and Development as the lead agency, to ensure that population ageing challenges are met. The Commission on Human Rights has initiated efforts to protect the rights and well-being of older Filipinos through its participation in the UN Open-Ended Working Group on Ageing (Dumpit, 2019).

The government has launched a social protection programme to curb old-age poverty; the programme includes the provision of PhilHealth coverage and monthly pension amounting to PHP500 (about US\$10) for indigent senior citizens (National Economic and Development Authority, 2017). Pensions of senior war veterans have been increased (RA 11164, 2018). The Centenarians Act of 2016 (RA 10868, 2016) gives centenarians a cash gift of at least PHP100,000 (about US\$2,000).

Congress and the Senate are discussing a wide range of policy issues to promote the well-being of OPs, including a bill to protect OPs from elder abuse (House Bill 7030, 2019), provide a universal social pension, and institutionalise senior citizen funds (Senate Bill 2138, 2019). To a large extent, the election of OP party list³ representatives to Congress has helped amplify OPs' concerns in policymaking.

³ The party-list representation in the House of Representatives of the Philippines is a 1987 constitutional provision providing 20% of the elected slots to the underrepresented community sectors or groups, including labour, peasant, urban poor, indigenous cultural, women, youth, older people, and other such sectors as may be defined by law (except the religious sector).

State of Ageing Research in the Philippines

A systematic consolidation of published and grey literature on ageing in the Philippines indicates a growing academic interest in OPs. A comprehensive review of ageing studies (De la Vega, 2016) showed that substantial research on ageing was conducted from 1980 to 2013. Many of these studies covered health-related areas, specifically the ‘5D’ outcome measures of death, disease, disability, discomfort, and dissatisfaction. Most of the studies are quantitative investigations that used large-scale sample surveys of older respondents (Cruz et al., 2016; Knox-Vydmanov, Horn, and Sevilla, 2016; Ogena et al., 2018).

The increase in ageing studies in the country has largely been driven by the availability of data on OPs. Over the past 2 decades, three nationally representative surveys on OPs have been conducted and have served as the basis for a substantial number of publications. These surveys are the 1996 Philippine Elder Survey, the 2007 Philippine Study on Aging, and the 2018 baseline survey of the Longitudinal Study of Ageing and Health in the Philippines (LSAHP), which is the focus of this report. Other than these surveys, the Philippine Census of Population and Housing (CPH), albeit limited in scope, provides data used in monitoring the size, growth, and basic socioeconomic profile of the older population. The 2010 CPH was the first time the country collected data on disability using the Washington Group (WG) Short Set on Functioning. The WG Short Set includes a six-item measure of difficulty in six domains of health: seeing, hearing, walking or climbing steps, remembering or concentrating, self-caring, and communicating using one’s usual language. The inclusion of these questions was a response to the new global framework for action to address ageing and disability issues. Another major data source that is useful in assessing the health of older Filipinos is the first National Disability Prevalence Survey (Model Functioning Survey) conducted by the Philippine Statistics Authority in 2016. The survey provides detailed information for measuring the health and functioning abilities of OPs, which is needed in monitoring the country’s progress toward the Sustainable Development Goals.

Although a pool of diverse research by specialised academic and research institutions is beginning to emerge, an important area that has been neglected is the assessment of transition amongst a variety of defined health states or incidence rates (particularly between health and function problems and/or disability), the mechanism that explains the pathway of such health transitions, and the factors affecting these

transitions. This limitation can be addressed only by collecting appropriate data through longitudinal or panel studies on ageing.

Longitudinal Data for Ageing Research

The ideal design for studies on ageing is the longitudinal or panel study, where the same group of survey respondents is followed through time (Birren and Schaie, 2001; Fozard, Metter, and Brant, 1990). The benefit of a longitudinal study is that it enables researchers to detect developments or changes in the characteristics of the target population, at group and individual levels, which are difficult to establish in cross-sectional studies. A longitudinal study overcomes one important limitation of the cross-sectional design: the cohort bias. The bias is associated with the failure of cross-sectional data to take into account the different conditions of people born in different generations, which may influence their current condition. Although they are more expensive than cross-sectional studies, panel studies focusing on OPs are becoming common in ageing societies. Most ageing societies have established strong databases for the analyses of longitudinal ageing studies that shed light on old-age health-related issues such as cognitive function, socioeconomic status, health status and physical performance, morbidity and mortality predictors, healthcare costs, and genetics (Stanziano, Whitehurst, Graham, and Roos, 2010). The longest-running panel survey, the Panel Study of Income Dynamics, began in 1968 in the United States and is directed by faculty at the University of Michigan (Panel Study of Income Dynamics, n.d.).

Longitudinal data have been widely used to understand health transitions such as the timing of the emergence of various health problems, the progression of diseases, loss of functioning, cognitive decline, and the factors that determine these life trajectories (National Academies of Sciences, Engineering, and Medicine, 2018; Newsom, Jones, and Hofer, 2013). Panel data have been useful in revealing the financial and social costs of these late-life health problems, as well as in identifying key protective factors and how they contribute to the attainment of healthy ageing.

A review of 25 low- and middle-income Asia-Pacific countries, including the Philippines, showed key data gaps across the region and a need for more longitudinal data (Teerawichitchainan and Knodel, 2015). The study underscored the lack of scientific data infrastructure that can inform key life domains at older ages, including health status and healthcare. Such infrastructure is essential in formulating evidence-

based policies to address the changing situation of OPs over time. The Philippines is one of the few countries in the region that do not have panel data on ageing (Table 1.1).

Table 1.1. Countries with 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	Vietnam	10.3
South 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 PDR	6.1
India	8.9		
Indonesia*	8.1		

Note: *The Indonesian Family Life Survey (IFLS) is not specific to ageing population; it covers a wide range of ages. Source: Saito, 2018; Teerawichitchainan & Knodel, 2015; UNDESA Population Division, 2017.

The LSAHP is expected to fill some of the data gaps in ageing research. Longitudinal data on relevant health and other outcomes in the Philippines will enable a comparison with ASEAN and other ageing countries and will allow the formulation of better intervention programmes. Comparative studies are essential to learning about the success and failure of each country in their attempts to deal with population ageing (Smith, 2012).

Structure of the Report

This report updates the description of older Filipinos, with a focus on their health and well-being, based on the 2018 baseline survey of the LSAHP. The report draws from a rich, multidisciplinary data source emanating from interviews of multiple actors, including older Filipinos and their caregivers, children, and household members. Household members were chosen from amongst the responsible adult members of the household, mainly the household head, who is in the best position to provide information on the OP respondent's household context. All data presented in this

report are from the OP's perspective. The analysis focuses on the outcome indicators of the various dimensions of health and well-being, categorised by fundamental demographic variables: age and sex of the OP respondent. Age is a key characteristic because it is the main driver of biological maturation, whilst a person's sex has been established as a source of significant variation amongst major demographic processes such as mortality (Lutz, Butz, and KC, 2014).

The report has 14 chapters covering the core issues in population ageing. The study design, sampling procedure, and a description of the proxy respondents are in Annexes A and B.

The first three chapters provide the background of the study (chapter 1); description of the study (chapter 2); and a discussion on the demography of ageing in the Philippines, the characteristics of OPs, their household composition, and their family (chapter 3). The subsequent chapters focus on the main study findings. Given the centrality of health in the ageing process, three chapters are devoted to health and health utilisation. Chapter 4 describes the various dimensions of general health: self-assessed health, diagnosed illnesses, oral health, sleep, the experience of pain, falls, incontinence, anthropometric measures, lifestyle practices such as smoking and drinking and mental health. Mental health amongst the older population is a major public health concern that has not yet been fully studied in the country.

The multiple disability measures, which have been formulated to be consistent and comparable internationally, are presented in chapter 5. The discussion covers the comprehensive functional assessment measures that are predictors of survival. These measures are the Global Activity Limitation Index, WG Short Set on Functioning, Nagi functioning measures, activities of daily living, and instrumental activities of daily living. Mental health and health utilisation are covered in chapter 6.

Chapter 7 presents the economic status of OPs, measured in terms of their sources of income, most important source of income, income levels, assets and liabilities, and self-assessed economic well-being. Chapter 8 focuses on the OPs' attitudes and beliefs on a range of topics such as falling in love and marriage in later years, living arrangements, family life, and gender issues. It discusses generativity, which is associated with life meanings and considered an important indicator of successful ageing.

Activities, social isolation, and information technology (IT) are tackled in chapter 9, which introduces leisure activities enjoyed by OPs, their involvement in religious activities, and their membership in religious and other organisations, which are important components of OPs' well-being. The chapter assesses OPs' life satisfaction and evaluates the extent to which feelings of loneliness and social isolation from family and friends prevail amongst Filipino OPs. It ends with a discussion of related issues such as the use of IT, which is relevant in measuring the OPs' online connectedness and their knowledge and consumption of IT.

Older Filipinos' knowledge of and access to privileges and services such as discounts for senior citizens and social pension schemes for indigent senior citizens are discussed in chapter 10, which also reveals OPs' preferred living arrangements. Chapter 11 investigates OPs' family support as indicated by intergenerational exchanges of financial, emotional, and material support. The chapter examines 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. It assesses OPs' attitudes towards reliance on children for financial support.

The lack of institutional care in the Philippines means that family members often care for older Filipinos at home. Chapter 12 explores the level and nature of informal care provision for older Filipinos. The chapter provides details on the profile of caregivers, their relationship with the OP, their living arrangement with the OP, their self-assessed health, and their views on the difficulty of their roles as caregivers. Also discussed is the caregiver's assessment of the OP respondent's functional health status and the OP's level of difficulty in performing activities of daily living. The discussion is culled from data from the caregiver questionnaire, which distinguishes between the primary caregivers (i.e. those providing care at the time of the study) and potential caregivers (i.e. those identified by the OP as possible future caregivers).

Using data generated from the adult-child questionnaire, chapter 13 examines the characteristics of children of OPs in terms of their relationship, living arrangement, and exchange of support with the OP respondent. The children's perceptions of the cognitive decline of their parent respondent are reported. This section includes adult children's perception of their parent's health status and their attitudes and beliefs on the issues that their older parent respondents were asked about. The perspectives of the children and caregivers will be useful in cross-validating data collected from the OP respondent on the same issues.

Each chapter discusses the concepts and measures adopted for the analysis, such as living arrangement, functional health, depression, generativity, loneliness, and social isolation. Each chapter ends with a summary of findings, discussion, and policy recommendations.

The report concludes with a discussion of the main findings of the study, underscoring possible policy and programme implications (chapter 14). Annex A lists sample areas covered in the study, discusses the sampling procedure, and computes weights. Annex B describes the differences between proxy and non-proxy respondents.

References

- 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 31 May 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 31 May 2019).
- Birren, J.E. and K.W. Schaie (eds.) (2001), *Handbook of the Psychology of Aging* (5th edition). San Diego, CA: Academic Press.
- 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., J.N. Natividad, M.L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- Dela Vega, S.A.F. (2016), *State of the Art of Researches on Aging in the Philippines*. Manila: Institute on Aging, University of the Philippines Manila.

- Department of Health (DOH) (Philippines) (2018), Guidelines for the Sub-Allotment and Utilization of Funds to Selected DOH Hospitals for Capability Building of the Medical and Nursing Staff in the Proposed Geriatric Centers. Department Order No. 2018-0357.
- Dumpit, K. (2019), Talking points on the work of NHRIs and GANHRI WG on Ageing. Presentation, New York, NY.
- 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 the Philippines (2018), An Act Increasing the Monthly Old-Age Pension of Senior Veterans, Republic Act No. 11164.
- Government of the Philippines (2019), Anti-Elder Abuse Act, House Bill Number 7030.
- Government of the Philippines (2010), Expanded Senior Citizens Act of 2010, Republic Act No. 9994.
- Government of the Philippines (2016), Centenarians Act of 2016, Republic Act No. 10868.
- Government of the Philippines (2019), Lingap Para Kay Lolo at Lola Act of 2019, Series 2138.
- Government of the Philippines (2019), National Commission of Senior Citizens Act, Series 2159.
- Government of the Philippines (2017), Tax Reform for Acceleration and Inclusion (TRAIN) Law of 2017, Republic Act No. 10963.
- Government of the Philippines (2019), Universal Health Care Act, Republic Act No. 11223.
- Knox-Vydmanov, C., D. Horn, and A. Sevilla (2016), *The Philippine Social Pension at Four Years: Insights and Recommendations*. Manila and London: Coalition of Services of the Elderly and HelpAge International.
- 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.
- 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. <https://doi.org/10.17226/25064> (accessed 28 May 2019).
- National Economic Development Authority (NEDA) (2017), *Philippine Development Plan 2017–2022*. Philippines: NEDA.

- 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.
- Ogena, N.B., G.T. Cruz, C.J.P. Cruz, and J.A. Evangelista (2018), 'UP Wellness Initiative for Seniors and Elders (UPWISE) – Project 1: Developing Collaborations, Demography and Situational Assessment', UPPI Working Paper Series, No. 2018-01. Quezon City: University of the Philippines Population Institute.
- Panel Study of Income Dynamics (n.d.). <https://psidonline.isr.umich.edu/> (accessed 31 May 2019).
- Saito, Y. (2018), Intercountry Longitudinal Study on Aging and Health. Presentation during the First Longitudinal Study of Aging and Health in the Philippines (LS-HAP) Advisory Council meeting, Seda Vertis North Hotel, Quezon City, 20 July 2018.
- 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-on-ageing-report/> (accessed 29 May 2019).
- United Nations Department of Economic and Social Affairs (UNDESA) Population Division (2015), *World Population Prospects: The 2015 Revision (DVD)*.
- 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 1 June 2019).
- World Health Organization (WHO) (2005), 'Strengthening Active and Healthy Ageing', in 58th World Health Assemblies. Geneva: WHO. <https://apps.who.int/iris/handle/10665/20248> (accessed 2 June 2019).

The 2018 Longitudinal Study of Ageing and Health in the Philippines

Grace T. Cruz, Yasuhiko Saito, Christian Joy P. Cruz, and Mark Ryan B. Paguirigan

The 2018 Longitudinal Study of Ageing and Health in the Philippines (LSAHP) is the first nationally representative longitudinal study on ageing in the Philippines. It is designed to (1) investigate the health status and well-being of older Filipinos and its possible correlates, and (2) assess the determinants of health status and transitions in health status and overall well-being.

The LSAHP is preceded by two nationally representative studies on older Filipinos: the 1996 Philippine Elderly Survey and the 2007 Philippine Study on Aging (see Cruz, Natividad, Gonzales, and Saito [2016]), making the 2018 baseline data the third nationally representative sample of older persons (OPs) in the country in the past 2 decades. The data generated from the LSAHP and the previous datasets will provide a wealth of information that will allow for a deeper understanding of ageing in the country. The LSAHP offers information on emerging issues and measures in ageing research not covered in previous studies of OPs in the country, such as generativity, social isolation, cognitive assessment tests (i.e. the Short Portable Mental State Questionnaire [SPMSQ]), the Washington Group Short Set on Functioning, and the Global Activity Limitation Indicator. The survey's data on performance indicators and other physiological data will allow for an interdisciplinary approach to the analysis of ageing, health, and well-being. The longitudinal data will provide a basis for assessing the risk factors related to old-age morbidity, mortality, timing of onset of diseases, and functional disability, particularly as they relate to socioeconomic and demographic factors, access to health services, pension, leisure, and other factors. The study will shed light on related issues affecting the well-being of OPs, such as the intergenerational flow of wealth and support, use of information technology, and availability and nature of caregiver support. This information will serve as scientific

evidence that will be useful for policymakers, health professionals, organisations providing services for OPs, and those working in gerontology and geriatrics.

The LSAHP is part of a comparative study of the Philippines and Viet Nam, two countries in the Association of Southeast Asian Nations (ASEAN) with no existing longitudinal data despite their emerging ageing populations. The study is funded by the Economic Research Institute for ASEAN and East Asia, with the Demographic Research and Development Foundation, Inc.¹ as the implementing agency in the Philippines.

Conceptual Framework

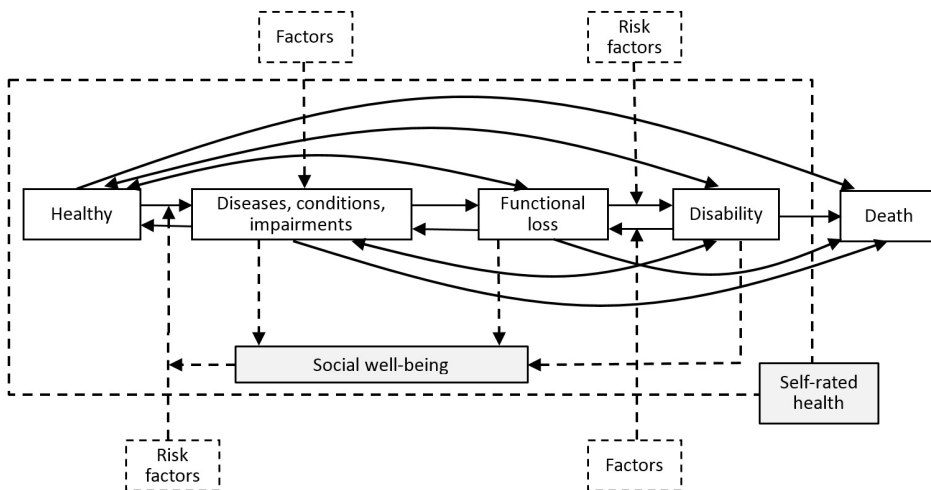
The World Health Organization (WHO) defines health as a multifaceted concept that includes physical, mental, and social aspects (WHO, 2006). Accordingly, we define healthy ageing not just as the absence of disease but also, more importantly, as the maintenance of functional ability. Consistent with the multifaceted definition of health, the study adopts the disablement process model as its conceptual framework (Figure 2.1). The model describes the pathways leading from health to the end of life (Crimmins and Seeman, 2001; Saito, Robine, and Crimmins, 2014; Verbrugge and Jette, 1994). The disablement process describes how chronic and acute conditions affect functioning in specific body systems, fundamental physical and mental actions, and activities of daily life (Verbrugge and Jette, 1994). The model goes beyond the old, traditional mortality and morbidity measures and widens the definition of health outcomes to encompass the concepts of impairment, functional limitation, and disability – what Verbrugge and Jette termed nonmortal outcomes. The proliferation of outcomes is related to the improved understanding of the multidimensional aspects of health outcomes and of the mechanisms through which health is affected (Verbrugge and Jette, 1994). 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).

Figure 2.1 outlines the five dimensions of the disablement process: (1) healthy; (2) diseases, conditions, and impairment; (3) functional loss; (4) disability; and (5) death. ‘Death’ represents what is traditionally used as an indicator of population

¹The foundation is a nonprofit, non-stock private organisation that aims to promote and undertake research, training, and other related activities in population and development.

health: mortality or life expectancy. This is computed based on age-specific mortality rates. Information on death amongst the sample will be available only after the second wave of the longitudinal survey, which is scheduled to be conducted in 2020. ‘Diseases, conditions, and impairment’ are commonly regarded as ill health or an unhealthy state. The WHO (2001) defines impairment as the loss of physiological integrity in a body function or anatomical integrity in a body structure, caused by disease, injury, or congenital defect. In the survey questionnaire, we asked about a set of chronic diseases and conditions, pain, falls, depression, and cognitive impairment as measures of diseases, conditions, and impairment. ‘Disability’ is not merely physiological impairment and loss of functioning but also includes the individual’s ability to interact with others and with his or her environment, as defined in the social-relational model and the biopsychosocial model (Washington Group on Disability Statistics, 2017). In the study, disability is operationalised by the following measures: activities of daily living (ADLs), instrumental ADLs, the Washington Group Short Set of Questions on Disability, and the General Activity Limitation Indicator. ‘Functional loss or limitations’ refers to restrictions in performing fundamental physical and mental actions used in daily life by one’s age–sex group that indicate the overall abilities of the body and mind to do purposeful work (Verbrugge and Jette, 1994). In the study, functional loss is captured by Nagi measures.

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



Source: Saito, Robine, and Crimmins (2014).

Respondents were asked a question on self-rated health as a global health measure and about other social aspects of health such as loneliness and happiness. These health states and questions will be employed to describe the health status of older Filipinos.

The International Classification of Functioning, Disability and Health, the WHO framework for health and disability, recognises that the progression from impairment to functional limitation to disability is not always stepwise. Thus, in the process of becoming disabled, the model allows for recovery from disability and transition back to a less disabled or healthier state. This nonlinear progression in the disablement process is indicated by arrows connecting the boxes in Figure 2.1.

Using the longitudinal survey data, we will be able to examine another aspect of health: health transitions. Each box in Figure 2.1 represents prevalence and each arrow represents transition or incidence. There are two sources of change in prevalence. For instance, the prevalence of disability may increase through declining mortality from disability outflow even though the transition to disability inflow stays constant. The prevalence of disability, however, could stay constant because declining mortality from disability is compensated by the declining health transition to disability. We need to pay attention not only to the prevalence for each box but also to health transitions.

To understand the current health status or health transitions, we need to identify the determinants of being in a certain health state, or the factors and risk factors of health transitions amongst health states. The factors that speed up or slow down the pathway (Verbrugge and Jette, 1994) are the social, psychological, and environmental factors that influence or modify the process of becoming disabled (Peek, Ottenbacher, Markides, and Ostir, 2003). This is shown in the second conceptual framework (Figure 2.2), which outlines the factors affecting health outcomes. 'Health outcome' refers to the same health outcomes in Figure 2.1. The boxes on the left side of 'health outcome' are the potential determinants of health outcomes. Each arrow in Figure 2.2 suggests the direction of the effect between sets of factors in general. Each box shows the topics included in the survey.

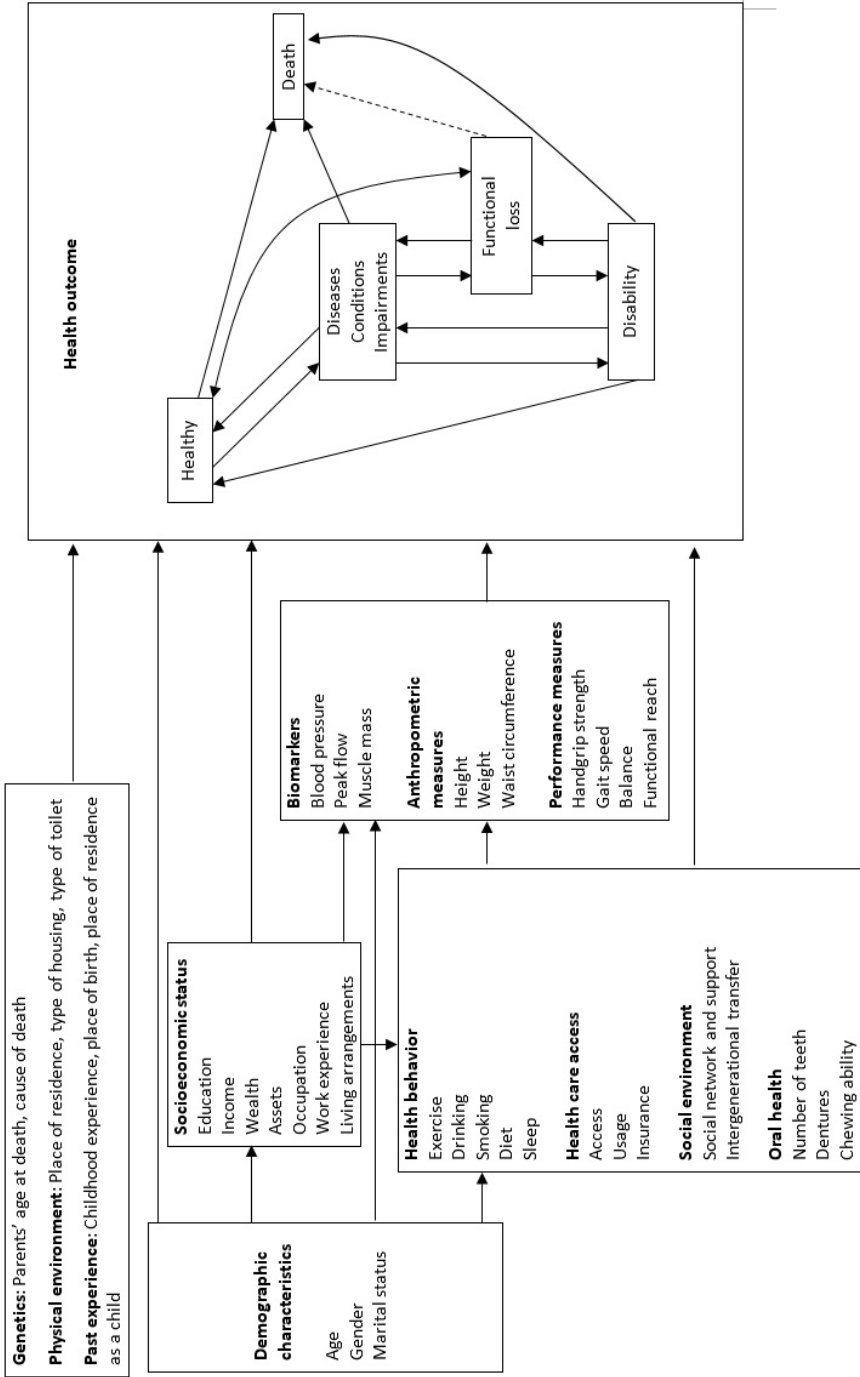
Demographic characteristics such as age, sex, and marital status have a direct effect on health status and overall well-being. The same is true for the OP's background of childhood experiences (type of community where the respondent grew up); parental characteristics (whether parents are alive, age at death, cause of death, and educational attainment); and the physical environment (place of residence and type of living conditions). Socioeconomic status has a direct effect on health outcomes, but it is also conceived as being affected by age, gender, and marital status. Other groups of factors conceived to have an effect on health status are health behaviours, healthcare access, oral health, and social network. These, in turn, are affected by demographic and socioeconomic factors. Biological risk factors such as blood pressure, body mass index, and grip strength also have a direct effect on health status and are, in turn, affected by sociodemographic and other health behaviours.

Study Design

The LSAHP is a longitudinal, nationally representative study of older Filipinos aged 60 and over living in community dwellings. The baseline survey was conducted in 2018, with the follow-up interview to be conducted 2 years after the baseline study. For respondents who die during the interim period, verbal autopsy data will be collected in the follow-up interview as the basis for estimating mortality rates and their determinants. The baseline survey oversampled those aged 70 to 79 with a factor of 2 and oversampled those aged 80 and above with a factor of 3 to ensure that there would be enough sample respondents in the older age group in the follow-up surveys. Face-to-face computer-assisted personal interviews were conducted for the survey using tablets.

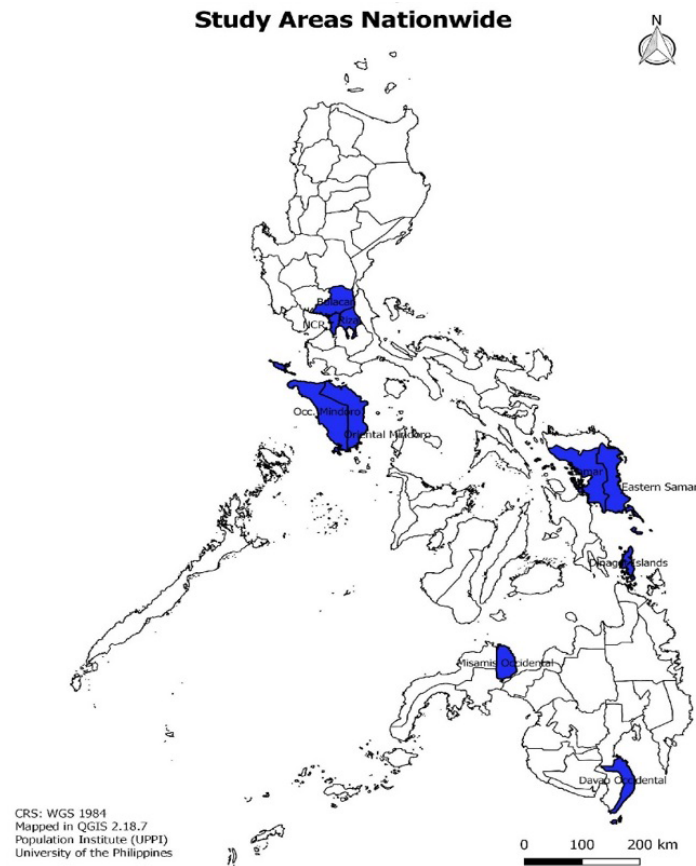
The LSAHP baseline data collection employed a multistage sampling design with provinces as the primary sampling units, barangays (villages) as the secondary sampling units, and OPs as the ultimate sampling units. Based on the latest census, in 2015, the provinces were stratified according to the estimated number of the population aged 60 and over in 2018. The study covered 167 barangays in two cities in Metro Manila (Pasig and Muntinlupa) and nine sample provinces (Rizal, Bulacan, Occidental Mindoro, Oriental Mindoro, Samar [Western Samar], Eastern Samar, Dinagat Islands, Misamis Occidental, and Davao Occidental) selected using stratified sampling. (See Figure 2.3 for a map of the LSAHP study areas and Annex A for a fuller discussion of the sampling design.)

Figure 2.2. Conceptual Framework for Factors Related to Health Outcome



Source: Saito (2018).

Figure 2.3. Map of the 2018 Longitudinal Study of Aging and Health in the Philippines Sample Area



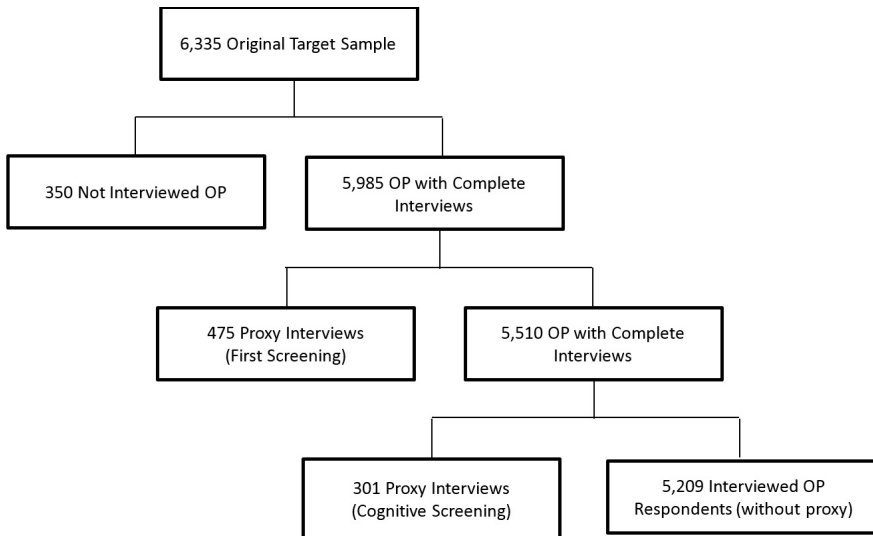
Cartography: Armand N. Camhol.
Source: Population Institute, University of the Philippines.

The LSAHP was designed to provide multilevel and multi-actor data. Baseline information was drawn from the OP's household, the OP respondents, the OP's primary caregiver or potential caregiver (if the OP did not have a caregiver at the time of the study), and one of the OP's adult children. The respondents of the household questionnaire were any responsible adult member of the household, preferably the household head. The child and caregiver respondents were restricted to those at least 18 years old at the time of the interview. Data from the OPs' children and caregivers were considered to allow for cross-validation of some information collected from the OP respondents, particularly on their health, caregiving, and intergenerational support.

Study Sample

The LSAHP baseline data were collected from October 2018 to February 2019. From a target sample of 6,335 OPs aged 60 and over, a total of 5,985 were interviewed – a response rate of 94%. The remaining 350 OPs either refused to participate or were not available for interview despite repeated visits (Figure 2.4). The 5,985 who were eligible for interview were assessed for fitness to be interviewed. Based on this initial assessment, 5,510 OPs were eligible for interview. The remaining 475 OPs were not eligible for interview and required proxy for any of the following reasons: (1) OP was hospitalised, sick, or incapacitated; (2) OP had difficulty hearing; (3) OP had difficulty speaking; and (4) OP had poor cognitive or psychological condition (e.g. memory loss, confusion, amongst others). The 5,510 OPs eligible for interview were further subjected to a cognitive test to determine their ability to answer the questionnaire. We used the SPMSQ for cognitive screening. Since the test has not yet been validated in the Philippines, we adopted the standard cut-off scores recommended by Pfeiffer (1975). The OP respondent's highest educational attainment was considered in determining the cut-off score. This is the first time a Philippine ageing study used a cognitive assessment test to determine the OP's eligibility and fitness to answer the questions. A total of 5,209 OPs scored above the cut-off and were thus eligible to proceed with the interview. The 301 who scored below the cut-off in the cognitive test were unable to proceed with the interview but were allowed a proxy to answer factual questions (see Annex B for a detailed discussion of the proxy interviews).

Anthropometric data were collected from 5,731 respondents (96% of the total respondents). Excluded from the anthropometric measurements were those who were bedridden, disabled, or sick, and unable to perform the required measurements (Table 2.1). Data on body mass and inner body scans using the Tanita Segmental Body Composition Monitor were collected from 4,022 respondents (70% of the total respondents with anthropometric data). A total of 5,143 caregivers and 3,573 children of OPs responded to the questionnaires. Children who were caregivers of the OP respondent were interviewed using the caregiver questionnaire and not the child questionnaire, explaining the higher yield of the former relative to the latter.

Figure 2.4. Study Sample

Source: Calculated by DRDF using original LSAHP data.

Table 2.1. Number of Respondents Per Questionnaire

Questionnaire	Number of Respondents
Household	5,985
Main	5,985
Adult child	3,573
Caregiver	5,143
Anthropometric	5,731
With Tanita measures	4,022
Without Tanita measures	1,709

Source: Calculated by DRDF using original LSAHP data.

Longitudinal Study of Ageing and Health in the Philippines Questions

Five questionnaires were developed for the baseline data collection:

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

The following section briefly describes the five questionnaires and the topics they covered:

(1) **Household questionnaire.** This questionnaire provides detailed demographic and economic information on household members, overseas employment, housing characteristics, tenure status, household assets, access to clean water and sanitation, whether the household is a recipient of the Conditional Cash Transfer Program of the government, and the children of the OP respondent.

2) **Main questionnaire for sample OPs.** The questionnaire mainly covers the health outcome measures mentioned in Figure 2.1, the determinants of health outcomes mentioned in Figure 2.2, and other measures of well-being. The questionnaire provides a significant amount of health information that will enable the examination of various dimensions of the OPs' health, including self-assessed health; illnesses; functional ability (ADL, instrumental ADL, and Nagi); mental health (Center for Epidemiological Studies-Depression Scale) and cognition; incontinence; personal habits such as smoking and drinking; and health utilisation.

The following are the major blocks of information collected from the main questionnaire:

- Socioeconomic and demographic characteristics
- Health status
- Physical ability and disability
- Mental health
- Health utilisation
- Income and assets
- Attitudes and beliefs
- Activities, social isolation, and information technology
- Services for the elderly
- Children and grandchildren
- Cognitive assessment

(3) **Anthropometric questionnaire.** This questionnaire collected data on the following measures: biomarkers (blood pressure and peak flow); anthropometric measures (height and weight); and performance measures (handgrip strength, gait speed, balance, and functional reach). Using the Tanita Segmental Body Composition

Monitor, we gathered the following information: body weight, body mass index, body fat percentage, total body water percentage, muscle mass, physique rating, bone mass, basal metabolic rate, daily calorie intake, metabolic age, and visceral fat. This information will be useful for exploring an interdisciplinary assessment of health outcomes by integrating biomarkers and other physiological indicators in the demographic analysis of health outcomes.

4) **Caregiver questionnaire.** We developed a short questionnaire for main or potential caregivers based on a caregiver–older adult dyad survey conducted in Singapore. The primary caregiver interview aims to provide needed information on the prevalence and nature of caregiving for OPs in the country. The questionnaire covers the following topics: relationship of the caregiver to the care recipient, preparations for caregiving roles, caregiving activities, number of hours allotted for caregiving work, the well-being of caregivers, and the support network and intervention programmes for caregivers of OPs. The questionnaire also provides information on the caregiver’s assessment of the OP respondent’s difficulty in performing ADLs, which can be used to cross-validate the OP’s self-assessment of these health indicators.

5) **Child questionnaire.** This questionnaire is based on a parent–child dyad survey in Taiwan, which is part of a longitudinal study for older adults and on a three-generation survey conducted in the United States. Based on these questionnaires, we developed a short questionnaire to examine the relationship between the adult child and older parent. One adult child per OP respondent was interviewed. The data on parent–child dyads from interviews of the OPs and their children will allow a more nuanced exploration of the nature of intergenerational relationships, support provision, and expectations regarding 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 questionnaires gathered data on the caregiver’s and adult child’s basic sociodemographic characteristics and their perception of the OP’s health status. Both caregiver and child interviews also provided additional contact information of the OP respondent to ensure an increased chance of response in the follow-up study 2 years after the baseline data collection.

All questionnaires were pretested, taking into account the age, sex, and urban–rural distribution of the OPs. The questionnaires were translated into three local languages – Filipino, Waray, and Cebuano – and back translated. The questionnaire content was also presented to the LSAHP Advisory Committee, composed of representatives from the academe, government agencies involved in ageing affairs, international development agencies, and nongovernment agencies. The Department of Health endorsed the study and included some rider questions to help assess some of their ongoing programmes for OPs. The Philippine Society of Geriatrics and Gerontology also provided help in translating the cognitive assessment test questions (SPMSQ).

Training of Field Personnel

The LSAHP core team conducted a total of five training sessions for field supervisors and field interviewers: two in Quezon City, one in Tacloban City, one in Cagayan de Oro City, and one in Davao City. The training covered 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, mock interviews using the paper and computer-assisted personal interview versions of the questionnaires, and actual field practice. A field manual was developed, printed, and distributed to all field personnel during the training. All field interviewers also received copies of the five questionnaires and other field materials (e.g. consent forms).

Fieldwork

The survey data were collected from 22 October 2018 to 22 February 2019 by 11 field teams. Each team consisted of a field supervisor and five field interviewers. The central office staff monitored the fieldwork by visiting the field areas and communicating regularly with the field supervisors.

Data Processing

CSEntry for Android, a free data entry software programme developed by the United States Census Bureau, was used for data collection. The processing of the 2018 LSAHP data began almost as soon as the fieldwork started. The electronic data

files were regularly synchronised within the team via Bluetooth®. Field supervisors synchronised the electronic data to a Dropbox cloud server. These data files were regularly downloaded by the central team to monitor the data collection and check for their completeness. Any errors and inconsistencies in the data were immediately communicated to the field teams whilst they were still in the field area.

Secondary data editing started even before the data collection was completed. It involved resolving inconsistencies, coding open-ended questions, and verifying the Philippine Standard Occupational Classification and the Philippine Standard Industrial Classification codes. Batch data editing was carried out using the CPro Batch Edit tool and IBM-SPSS.

In this report, the numbers in the tables are weighted numbers, except for the tables for the children and caregivers because they do not constitute a representative sample. Percentages based on fewer than 30 cases are enclosed in parentheses to caution readers that, when interpreting data, a percentage based on fewer than 30 cases may not be statistically reliable.

Ethical Clearance

As part of the requirements for the conduct of the study and to ensure that the researchers adhere to ethical standards, an ethics review clearance was sought from the University of the Philippines Manila Research Ethics Board Review Panel 2. Data gathering began after the ethics review clearance was issued on 19 October 2019. Consistent with the provisions of the ethics clearance, the field personnel secured the consent of the OPs, caregivers, adult children, and household respondents prior to the interview.

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 (accessed 5 June 2019).
- Crimmins, E. 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.
- Cruz, G.T., J.N. Natividad, M. L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- 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 (accessed 21 May 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 & 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. 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 21 May 2019).
- Verbrugge, L.M. and A.M. Jette (1994), 'The Disablement Process', *Social Science & Medicine*, 38(1), pp.1–14. doi:10.1016/0277-9536(94)90294-1 (accessed 21 May 2019).
- Washington Group on Disability Statistics (2017), The Washington Group Short Set on Functioning (WG-SS). <http://www.washingtongroup-disability.com> (accessed 21 May 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. https://www.who.int/governance/eb/who_constitution_en.pdf (accessed 13 July 2019).

Filipino Older Persons

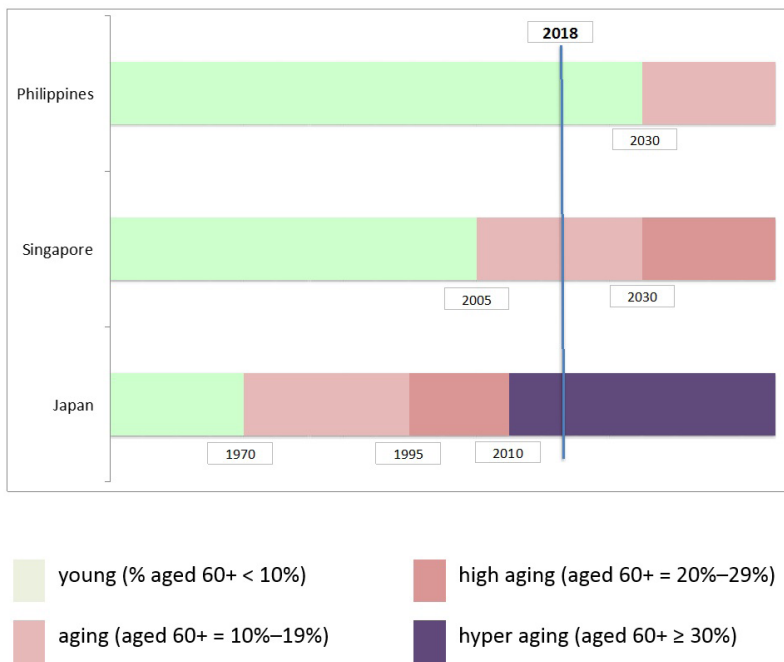
Christian Joy P. Cruz and Grace T. Cruz

Population ageing is poised to become one of the most significant social transformations of the 21st century, with implications for nearly all sectors of society, including labour and financial markets; demand for goods and services such as housing, transportation, and social protection; and family structures and intergenerational ties (UNDESA, Population Division, 2015a). Preparing for the economic and social shifts associated with an ageing population is essential to ensuring development. Population ageing is particularly relevant for achieving the Sustainable Development Goals on poverty eradication; ensuring health and well-being at all ages; promoting gender equality and full and productive employment and decent work for all; reducing inequalities between and within countries; and making cities and human settlements inclusive, safe, resilient, and sustainable (UNDESA, Population Division, 2015a).

Whilst the population of the world is ageing, the same cannot be said for the Philippines, which still has a relatively young population largely due to the country's high, albeit declining, fertility. A country is considered young if the proportion of its population 60 years old and over is less than 10%; it is considered ageing if the said proportion is 10–19%, high ageing if 20–29%, and hyper ageing if 30% or more (UNDESA, Population Division, 2015b). Following these definitions, Japan is considered a hyper-ageing and Singapore an ageing society. Japan became an ageing society as early as 1970, with Singapore following suit in 2005 (Figure 3.1). Singapore is projected to become a high-ageing society by 2030 – about the time the Philippines is expected to become an ageing society (Figure 3.1). Demographic data show an increasing number and proportion of older Filipinos over time, with the older population registering the fastest growth rate compared with other age groups, and the trend is expected to hold (Cruz, 2019).

In this chapter, we present the overall picture of older Filipinos emanating from the 2018 Longitudinal Study of Aging and Health in the Philippines (LSAHP) baseline data, starting with the characteristics of their households, housing, household amenities, and transportation. We then describe the characteristics of older Persons (OPs), their living arrangements, and their family networks, which include their parents, siblings, spouses, children, and grandchildren.

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



Data source: UNDESA, Population Division (2019).

Household Population and Housing Characteristics

A household survey questionnaire was used to gather information on OPs’ household composition and basic sociodemographic characteristics, housing amenities, poverty indicators, and family networks, including their children. The study adopted the official definition of a household used by the Philippine Statistics Authority (PSA, 2017a): ‘a social unit consisting of a person living alone or a group of people who sleep in the same housing unit and have a common arrangement in the preparation and consumption of food’.

The 5,985 households of the sampled OPs covered in the study have a total of 24,162 household members. Each household has one OP respondent, a selectivity criterion that distinguishes our study households from the average Filipino household. The sample households have an older age composition, with an average age of 41 years compared with 24 years for the Filipino household in 2015 (PSA, 2017b). The sample household size is smaller, with an average of 3.8 members compared with the national average of 4.4. (PSA, 2016). A significant proportion of OPs (73%) are household heads; the proportion is higher amongst males (59%) than females (41%) (Table 3.1).

Table 3.1. Household and Housing Characteristics

A. Household characteristics	Mean
Mean age of household members	
Males	37.68
Females	44.20
Both sexes	41.11
<i>N of cases</i>	24,162
Mean household size	3.84
<i>N of cases</i>	5,985
	%
Households headed by an older person	73.4
Households headed by males	59.2
Households headed by females	40.8
Households with an OFW	3.7
Households with a 4Ps/CCT recipient	13.4
Households that experienced hunger in the last 3 months	13.5
<i>N of cases</i>	5,985
Frequency of hunger	
Only once	19.8
A few times	62.0
Often	13.0
Always	5.3
<i>N of cases</i>	770

B. Housing characteristics	%
Own house and lot	62.6
In dwellings with roof made of strong materials	84.7
In dwellings with floors made of cement/marble/ceramic tiles	73.2
In dwellings with walls made of concrete/brick/stone	57.9
With electricity	92.2
Main source of drinking water	
Water piped inside house	13.0
Water piped into yard or plot	3.1
Water piped to neighbor	2.5
Public tap	12.9
Tube well or borehole	10.6
Protected well	1.8
Protected spring	9.5
Bottled water/refilling station	43.6
Others (e.g., rainwater, surface water)	3.0
Main source of water for other purposes like cooking and hand washing	
Water piped inside house	46.5
Water piped into yard or plot	4.6
Water piped to neighbor	2.9
Public tap	12.5
Tube well or borehole	14.1
Protected well	3.0
Protected spring	8.0
Others (e.g., rainwater, surface water)	8.4
With flush toilet	88.0
Household amenities	
Aircon	9.5
Washing machine	38.5
Stove with oven/gas range	16.9
Refrigerator/freezer	37.1
Personal computer/laptop	10.6
Cellular phone/mobile phone	65.4
Landline/wireless telephone	2.9
Audio component/stereo set	12.6
Karaoke/videoke/Magic Sing	6.6

B. Housing characteristics	%
CD/VCD/DVD player	18.9
Television	72.6
Radio/radio cassette player	34.3
Internet access	17.8
Vehicles	
Motorized banca/boat	4.3
Car/jeep/van	5.9
Motorcycle/tricycle	25.2
<i>N of cases</i>	5,985

4Ps = Pantawid Pamilya Pilipino Program, CCT = Conditional Cash Transfer, CD = compact disc, DVD = digital video disc, OFW = overseas Filipino workers, VCD = video compact disc.
Source: Calculated by DRDF using original LSAHP data.

We collected information capturing the prominence of international labour migration, which is closely linked to the poverty situation in the country. Of the households studied, 4% have at least one member who is an overseas Filipino worker (OFW), which indicates the impact of international migration on OPs' households. The experience of hunger was used as a proxy measure of poverty. A significant proportion of households (13%) had experienced hunger in the 3 months preceding the survey; amongst them, almost a fifth (18%) had experienced severe hunger (i.e. experienced hunger often or always for the period covered). The preponderance of poverty in households with an OP is also evident in the high proportion (13%) who are recipients of the government's Conditional Cash Transfer anti-poverty programme. The programme, locally known as the Pantawid Pamilya Pilipino Program (4Ps), aims to break the cycle of poverty by providing conditional cash grants to the poorest of the poor (World Bank, 2017).

In terms of housing characteristics and amenities, more than three in five households (63%) reported ownership of the house and lot they are residing in. This is higher than the corresponding percentage (55%) observed in the 2015 census (PSA, 2017a). The remaining 37% of OP households either own their house but not the lot or are renting their house and/or lot. These households include the 2% who are considered informal settlers, having admitted occupying a house and/or lot without the owner's consent. Most of OPs' housing units have roofs made of durable materials (85%); 73% have floors made of cement, marble, or ceramic tiles; and more than half (58%) have walls made of permanent materials (concrete, brick, stone). About 8% of OP households do not have access to electricity.

In accordance with the indicators of Sustainable Development Goal target 6.2, which calls for achieving access to adequate and equitable sanitation and hygiene for all as well as ending open defecation (United Nations, 2017), we collected information on OP households' main source of drinking water and toilet facilities. Results indicate that the main source of drinking water is purchased bottled water or water from refilling stations (44%), followed by water piped into dwelling units (13%), public taps (13%), tube wells or boreholes (11%), and protected springs (10%). At least 3% depend on unsafe and untreated water such as rain or surface water as their main source of drinking water. Water for other purposes such as cooking and hand washing mainly comes from piped water inside the house (47%), tube wells or boreholes (14%), public taps (12%), and protected springs (8%).

The great majority (88%) of households have a flush toilet, although it is not clear whether it is shared with other households. This level indicates some measure of advantage over Filipino households in general, which reported a corresponding proportion of 66% in the 2017 National Demographic and Health Survey (PSA and ICF, 2018). This progress notwithstanding, a considerable proportion of sanitation services are still not properly managed; 1% of households still use pit latrines, whilst 7% have no toilets at all. The latter include those who use composting toilets, bucket toilets, hanging toilets, or no toilet facilities (bushes or fields), which can spread diseases and provide a breeding ground for mosquitoes, as well as pollute groundwater and surface water that may serve as potential sources of drinking water (United Nations, 2017).

Data on household amenities are suggestive of the economic status of households with an OP. The most common appliances owned are television sets (72%), cellular phones (65%), washing machines (39%), refrigerators (37%), and radios (34%). Motorcycles and/or tricycles (25%) are the most commonly owned modes of transportation in OPs' households.

Characteristics of Older Filipino Persons

This section provides a profile of Filipino OPs 60 years and over based on the nationally representative study sample of LSAHP respondents. Following the general pattern in the population, females have the numeric advantage, constituting 60% of the total OP population. This advantage is also reflected in the sex ratio of OPs, with 68 males for every 100 females in the population age group 60 years and over (Table

3.2). The mean age is 69 years old, with males and females registering an average of 68 and 70 years, respectively.

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

Background characteristics	%
Sex	
Male	40.3
Female	59.7
Age	
60-69	62.8
70-79	25.9
80+	11.2
Mean age	
Male	68.20
Female	69.55
Both sexes	69.01
<i>N of cases</i>	5,985

Source: Calculated by DRDF using original LSAHP data.

Significant gender differences exist in marital status, with more male OPs currently married (63%) or in live-in arrangements (6%). The corresponding proportions for the female OPs are 31% and 3%, respectively. Most female OPs are widowed (56%), whilst a minority reported having had their marriage annulled or being separated or divorced (7%). Divorce remains illegal in the Philippines but is considered legal under the Code of Muslim Personal Laws of the Philippines. The code states that divorce is legal if both parties are Muslim or if only the male party is Muslim and the marriage was solemnised in accordance with Muslim laws or the code in any part of the Philippines (Presidential Decree No. 1083, 1977). As of the 2015 census, 6% of the country's population was Muslim (PSA, 2017a).

As expected, widowhood increases with advancing age. This age gradient is observed regardless of gender but is more evident amongst females (87% of those aged 80+) than males (47% of those aged 80+) (data not shown). This result reflects the higher propensity of male OPs to remarry or enter another union after the spouse dies.

The higher proportion of older males than females in a live-in arrangement is also indicative of the greater likelihood amongst older males to take younger women as their partners in an informal union. Another notable finding is that 3% have remained unmarried, with the proportion slightly higher amongst males than females (4% vs. 2%).

Consistent with the 1996 Philippine Elderly Survey and 2007 Philippine Study on Aging, older Filipinos exhibit a relatively low educational profile, with elementary education as the modal educational attainment. Close to 7 in 10 (66%) reported having at most an elementary education, with no significant difference by sex (Table 3.3). Close to 2 in 10 (19%) received at most a high school education, and 8% have a college education; 7% did not receive formal schooling or received at most a preschool education. Results in Table 3.3 exhibit significant improvements in the level of education across age cohorts. This is distinctly shown in the proportion with at least some high school education, which improved from 18% amongst those aged 80+ to 31% amongst those aged 60–69. The age pattern indicates the improving educational profile over time.

Related to OPs' education is OPs' employment status. Almost half of older Filipinos continue to be economically productive; the proportion is significantly higher amongst males and those in their 60s. Nearly three-fifths (57%) of male OPs and close to two in five (39%) female OPs are engaged in economic activities (Table 3.3). A significant disparity exists in work status across age groups, with 60% of those aged 60–69, 28% of those aged 70–79, and only 7% of those aged 80 and over currently working.

Similar to the overall population profile, the great majority (86%) of OPs are Roman Catholics, with the remaining 14% distributed across other minor religions, including Iglesia ni Kristo (Church of Christ) and other Christian denominations. More OPs reside in rural (58%) than in urban (42%) areas, with men more likely than women to prefer rural areas (61% vs. 56%).

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								
Never married	4.2	2.5		3.2	2.3	5.2		3.2
Currently married	63.4	31.3		52.8	35.5	16.3		44.2
Live in	6.3	3.0	***	5.1	3.8	1.7	***	4.4
Annulled/ Divorced/ Separated	6.0	7.3		8.0	5.7	2.3		6.8
Widowed	20.1	55.9		30.8	52.8	74.5		41.5
Education								
No schooling/ Pre-school	7.1	6.6		5.5	7.4	12.7		6.8
Elementary	64.7	67.3	n.s.	63.7	71.5	68.9	n.s.	66.3
High school	20.8	17.8		21.3	15.7	13.9		19.0
College or higher	7.4	8.2		9.5	5.4	4.6		7.9
Religion								
Roman Catholic	87.7	84.0	*	86.6	84.2	81.8	*	85.5
Others	12.3	16.0		13.4	15.8	18.2		14.5
Place of residence								
Urban	38.9	43.9	n.s.	41.7	45.1	35.8	n.s.	41.9
Rural	61.1	56.1		58.4	54.9	64.3		58.1
Work status								
Currently working	56.7	38.7	***	60.4	27.8	7.4	***	46.0
Not currently working	43.3	61.3		39.6	72.2	92.7		54.0
<i>N of cases</i>	2,412	3,574		3,760	1,552	673		5,985

*p < .05. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Living Arrangements and Residential History

Older Filipinos' living arrangements are important in the context of the ageing process, given their established impacts on OPs' health and well-being (Feng, Falkingham, Liu, and Vlachantoni, 2019; Feng, Jones, and Wang, 2015; Zhang, 2015). The OPs' residential history is dynamic and dependent on a multitude of reasons such as changes in marital status, health, and economic well-being (Kasper, Pezzin, and Rice, 2010; Liang, Brown, Krause, Ofstedal, and Bennett, 2005; Martikainen, Nihtila, and Moustgaard, 2008). With the onset of significant changes such as urbanisation and international migration, changing family norms and structures, as well as shifts in values, it is important to examine how these factors affect OPs' living arrangements. This information will contribute to the understanding of OPs' well-being and/or vulnerability and lead to better interventions as we anticipate a further surge in the size of the older sector.

Data from the 1996 Philippine Elderly Survey and 2007 Philippine Study on Aging show that the most common living arrangement is co-residence with children (Cruz, Natividad, Lavares, and Saito, 2016). This finding is confirmed by the LSHP; 60% of OPs are co-residing with at least one child (Table 3.4). This arrangement is more common amongst males than females (64% vs. 58%). Those in the youngest cohort are the most likely to live with their children, which is expected given that many of the youngest OPs might still have younger and unmarried children who have not yet established independent residence. About a tenth (9%) are living with their spouse only; the proportion is significantly higher amongst males than females (12% vs. 8%). A significant proportion (17%) reported other types of living arrangements, including living with siblings, living with other relatives, or living with nonrelatives such as housemaids or caregivers. A considerable proportion of OPs (13%) live alone; this is more common amongst females and those in the oldest age group (80+). Whilst there seems to be a high level of independent living amongst OPs, the picture changes when viewed in the context of their children's living arrangements. Results show that 61% of OPs who live alone have children living in the same barangay. This means that whilst, structurally, 13% live alone, this proportion is reduced, functionally, to about 5%, given the help and assistance that can be forthcoming from children who live nearby. The situation is more apparent amongst females; they have a seemingly high level of living alone (15%), but nearly three quarters have children who live close by. This means that only 4% of older Filipino women live alone without any child living in their neighbourhood. Amongst OPs living alone, 10% have never married and have no children, whilst about 6% are no longer in a union and do not have children in the same barangay of residence (data not shown). These groups are vulnerable and can be a potential target for intervention.

Another interesting factor to consider is OPs' residential history. How mobile are older Filipinos? Results show that 7% have never moved out of their place of birth; this is more common amongst males than females (9% vs. 7%) and amongst those aged 80+ (12%). About 14% moved to their current residence in the past 5 years, with the proportion who reported doing so slightly higher amongst males and those in the oldest age group (80+). The great majority (75%) claimed to have been settled in their current residence for at least 5 years. OPs who are not currently residing in their birthplace have been living in their current residence for 24 years on average, indicating the relative stability of residence in their old age. Only 4% said they had moved into their current place of residence within a year from the time of the survey.

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	11.3	15.0		11.2	16.4	19.3		13.5
Living with spouse only	11.8	7.7		8.6	12.4	6.4		9.3
Living with at least 1 child	63.7	57.9	**	64.9	51.1	54.9	***	60.2
Other types of arrangement	13.3	19.5		15.2	20.2	19.4		17.0
<i>N of cases</i>	2,412	3,574		3,760	1,552	673		5,985
Among those living alone								
Without children living in the same barangay	61.2	27.0		43.2	40.3	20.0		38.5
With children living in the same barangay	38.8	73.0	***	56.8	59.8	80.0	n.s.	61.5
<i>N of cases</i>	271	534		422	254	130		806
Residential history								
Number of years lived in current residence								
Since birth	8.5	6.6		6.2	8.1	11.9		7.4
Less than 1 year	3.4	4.2	n.s.	3.6	4.3	4.2	***	3.8
Within the last 5 years	15.7	13.2		14.6	12.2	16.5		14.2
More than 5 years	72.4	76.1		75.6	75.4	67.4		74.6
<i>N of cases</i>	2,364	3,489		3,677	1,519	655		5,851
Mean years lived in current residence	22.04	24.59	**	22.22	25.72	26.09	**	23.56
<i>N of cases</i>	2,363	3,488		3,675	1,519	657		5,851

p < .01. *p < .001. n.s. = not significant

Source: Calculated by DRDF using original LSAHP data.

The OPs' aversion to residential change is also evident in the finding that only 2% expressed an intention to migrate in the next 2 years.

OPs perceive the barrio or rural area as their ideal place to live. If given a choice, the overwhelming majority of OPs (79%), more so amongst males and the older cohort, prefer to live in the countryside over any other setting. Barrios are characterised as having fewer settlement units, usually surrounded by farmlands where the barrio people work, where one lives with family members close by (Romani and Thomas, 1954).

Filipino Older Persons and Their Families

The absence of strong government support and an intervention programme to address the needs of the older sector heightens the role of the family as the main actor in the care of its older members. The family network includes parents, siblings, spouses, children, and grandchildren who interact with OPs in connection to flows of

assistance and sharing of resources. Kinship obligations are relevant in the context of the discussion of OPs' well-being. This section presents the characteristics of OPs' family network, including parents, siblings, spouse, children, and grandchildren, as a basis for assessing the size and quality of OPs' family network.

Given their advanced age, not too many OPs are expected to have surviving parents. Only 8% have either a surviving father or mother, and an insignificant proportion (0.4%) have both surviving parents (data not shown). Given that women outlive the males, 7% of OPs still have surviving mothers and only 1% have surviving fathers (Table 3.5). Significant differences exist across age; more OPs aged 60–69 reported that their mother is still living (11%), compared with 1% of those in older age groups.

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	1.4	1.0	n.s.	1.8	0.2	0.0	**	1.2
Mother	7.2	7.2	n.s.	10.8	1.3	0.8	***	7.2
Highest educational attainment of father								
No schooling/ Pre-school	25.0	19.7		20.5	23.4	25.7		21.8
Elementary	43.2	48.4	**	49.9	43.1	33.3	***	46.3
High school	5.9	5.6		7.2	3.4	2.8		5.7
College or higher	4.2	1.0		2.8	1.7	0.9		2.3
Do not know	21.8	25.3		19.6	28.4	37.3		23.9
Highest educational attainment of mother								
No schooling/ Pre-school	24.2	19.3		18.7	24.5	28.2		21.3
Elementary	48.1	55.6	n.s.	58.2	47.3	33.8	***	52.6
High school	5.0	4.0		5.5	2.9	2.2		4.4
College or higher	2.7	0.9		2.2	0.6	0.6		1.6
Do not know	20.0	20.1		15.4	24.7	35.2		20.1
Mean number of siblings	6.76	6.37	n.s.	6.80	6.19	5.81	***	6.53
Mean number of living siblings								
All	4.08	3.77	n.s.	4.49	3.26	1.94	***	3.89
Brothers	2.13	1.87	**	2.21	1.68	1.00	***	1.98
Sisters	2.18	2.22	n.s.	2.40	1.87	1.71	***	2.21
N of cases	2,411	3,574		3,760	1,552	673		5,985

p < .01. *p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSHP data.

We inquired about the educational attainment of OPs' parents but about a fifth of OPs did not know or could not remember. More than a fifth reported that their father (22%) or mother (21%) had no formal schooling or had at most a preschool education. Another half reported that their parents had at most an elementary education (46% for father and 53% for mother), and less than a tenth said their parents were able to go beyond the elementary level. These findings clearly show the poorer education profile of the generation that preceded the current cohort of older Filipinos.

As OPs come from a high-fertility regime, it is not surprising that they report having a high number of siblings. The mean number of siblings is seven, of whom four are still alive, equally split by gender.

OPs who are currently in a union, separated, or divorced, or who had had their marriage annulled were asked about the educational attainment of their spouses. In general, the education profiles of OPs and their spouses are comparable, although the latter seem to have an edge, as shown in the higher proportion of spouses who were able to attain a college education and the lower proportion without formal schooling. Elementary education is the spouses' modal educational attainment (61%), and about a fifth were able to reach the high school level (23%) (Table 3.6). No apparent gender disparity exists in the education profile for spouses.

Table 3.6. Characteristics of Spouse by Sex and Age

Characteristics of Spouses	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Highest educational attainment of father								
No schooling/ Pre-school	4.0	6.0		3.8	7.7	9.3		4.8
Elementary	60.3	63.2	n.s.	59.7	67.3	64.7	*	61.5
High school	24.9	20.3		24.1	19.3	21.2		22.9
College or higher	10.9	10.6		12.5	5.8	4.7		10.8
Work status								
Currently working	40.9	63.0	***	55.0	38.3	23.5	***	50.2
Not currently working	59.1	37.0		45.0	61.7	76.5		50.0
<i>N of cases</i>	1,681	1,227		2,178	608	122		2,908

* $p < .05$. *** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

We asked those currently in a union about the work status of their spouses. Results show comparable levels of economic involvement for OPs and for their spouses, with half (50%) of the spouses currently working. Gender and age disparities are consistent, with more females reporting that their spouses are currently working, implying the male advantage in the employment sphere. Consistent as well is the higher propensity of spouses of younger OPs to be engaged in economic activities. Nearly all older Filipinos have children (95%) (Table 3.7). On average, they have six children ever born, reflecting the high-fertility experience of their generation. Of this number, about five children are still living. The average number of children ever born is not different across the gender of OPs although differentials across age groups are evident, as observed in the drop in the mean number of children ever born as age decreases, from 6.8 children amongst OPs aged 80+ to 5.4 children amongst OPs aged 60–69. Childlessness is not common, with less than 1% reporting no children ever born.

Table 3.7. 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	94.4	95.9	n.s.	96.1	94.2	93.3	*	95.3
<i>N of cases</i>	2,411	3,574		3,760	1,552	673		5,985
Mean children ever born	5.67	5.70	n.s.	5.37	6.02	6.79	***	5.69
Children ever born			***				***	
0	1.0	0.5		0.8	0.5	0.5		0.7
1	3.1	7.3		6.3	4.2	4.9		5.6
2	7.1	7.8		8.7	5.5	5.4		7.6
3	13.5	11.2		13.9	11.0	4.5		12.1
4	14.6	12.4		14.1	13.5	7.6		13.3
5+	60.7	60.8		56.1	65.2	77.1		60.8
<i>N of cases</i>	2,276	3,427		3,614	1,461	628		5,703
Mean age at first child	26.12	22.18	***	23.84	23.45	23.79	n.s.	23.73
<i>N of cases</i>	2,141	3,308		3,463	1,425	560		5,449
Mean number of living children	5.02	4.91	n.s.	4.69	5.33	5.46	***	4.96
Number of living children			*				*	
0	1.4	1.1		1.1	1.0	2.6		1.2
1	3.1	7.6		6.6	4.5	4.0		5.8
2	9.3	11.0		11.6	8.3	7.5		10.3
3	15.9	15.2		16.9	14.7	9.7		15.5
4	16.8	15.3		16.8	16.0	10.5		15.9
5+	53.6	49.7		47.0	55.6	65.8		51.2
<i>N of cases</i>	2,277	3,428		3,615	1,462	628		5,703
Percent with at least one dead child	34.2	45.3	***	34.5	46.5	65.4	***	41
<i>N</i>	2277	3426		3615	1461	628		5704

Living Arrangement and Residential History	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean number of dead child(ren) (among those who experienced child mortality)	1.89	1.97	n.s.	1.99	1.80	2.04	n.s.	1.94
<i>N of cases</i>	779	1,537		1229	678	409		2317
Number of dead children			***				***	
0	65.8	55.1		66.0	53.6	34.8		59.4
1	17.4	22.3		16.9	24.2	30.9		20.3
2	9.7	10.2		7.9	12.7	16.1		10.0
3	2.5	7.9		5.0	5.9	9.9		5.7
4	3.2	1.4		1.5	2.2	5.4		2.1
5+	1.4	3.1		2.7	1.4	2.9		2.4
<i>N of cases</i>	2,277	3,427		3,615	1,461	628		5,704
% who have adopted or stepchildren	6.8	3.5	*	5.7	3.4	2.8	*	4.8
<i>N of cases</i>	2,277	3,426		3,615	1,461	627		5,703
Among those who have adopted or stepchildren, mean number of living adopted or step children	2.32	2.97	n.s.	2.82	1.86	2.06	n.s.	2.60
<i>N of cases</i>	156	119		208	50	17		275
Among those who have adopted or stepchildren, mean number of dead children (among those who experienced child mortality)	2.52	1.23	*	2.00	1.62	1.35	n.s.	1.94
<i>N of cases</i>	31	25		50	4	3		57

* $p < .05$. *** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSHP data.

A relatively high proportion of OPs experienced child mortality: two in five OPs reported having lost at least one child to death. Those who had such an experience reported about two children dead.

Five percent of OPs have adopted children or stepchildren, each OP having an average of 2.6 adopted children or stepchildren. Females are less likely to adopt but when they do, they adopt more children. About twice as many males than females have adopted children or stepchildren (7% vs. 3%), but females adopted an average of three children as compared with two for males. The youngest cohort are the most likely to have adopted, and they reported the highest mean number of adopted children.

Grandparenting is an almost universal experience. At least 96% reported having at least one grandchild from their own children, stepchildren, and adopted children (Table 3.8). On average, OPs became grandparents at about 48 years old. About one-fourth (24%) are involved in the partial or full care of any of their grandchildren, significantly more so amongst women (27% vs. 19%). This is consistent with the

2007 PSOA results. Whilst more women reported being more involved in the care of grandchildren, men are not so far behind, indicating that grandfathers are also highly involved in grandchild care. Although the proportion who participate in the care of grandchildren expectedly decreases as age increases, a notable proportion (8%) of those aged 80+ are actively involved in grandchild care.

Table 3.8. 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	94.4	97.0	*	95.4	97.0	97.3	n.s.	96.0
<i>N of cases</i>	2,278	3,426		3,614	1,462	628		5,704
Mean age when older person first had biological grandchild	49.99	46.91	*	47.30	48.43	57.68	**	47.89
<i>N of cases</i>	374	801		911	221	43		1,174
% who take care of any of the grandchildren, either fully or partially	19.3	27.3	***	29.5	18.4	7.7	***	24.2
<i>N of cases</i>	2,111	3,261		3,376	1,392	602		5,370
For older persons taking care of any grandchild:								
% who live with any grandchild	84.6	80.3	n.s.	80.3	86.0	87.0	n.s.	81.7
% who are solely in charge of taking care of any grandchild	17.1	34.3	**	27.4	33.7	34.4	n.s.	28.9
Reasons for being solely in charge								
Grandchild's parent is working abroad	18.0	9.8	n.s.	7.8	23.0	7.6	n.s.	11.3
Grandchild is orphaned	8.9	2.0	*	2.5	3.8	12.8	n.s.	3.3
Grandchild prefers to live with older persons than with own parents	8.0	9.0	n.s.	4.8	18.6	25.0	**	8.9
Mother/Father or both parents of grandchild is working outside the town/city but within the Philippines	8.0	40.6	***	39.7	22.6	10.6	n.s.	34.6
Grandchild's parents are separated	47.7	29.9	n.s.	37.5	22.5	19.2	n.s.	33.3
Grandchild's parents are not married	0.0	4.3	n.s.	4.6	0.1	2.5	***	3.5
<i>N of cases</i>	70	305		273	86	16		375

*p < .05. **p < .01. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

OPs take their grandparenting role seriously. For OPs who reported taking care of their grandchildren either fully or partially, 82% are co-residing with their grandchildren, with no significant differences across sex and age. At least 29% are solely responsible for the care of that child; this is more common amongst females than males (34% vs. 17%). The common reasons for being solely in charge of any grandchild are that the grandchild's mother and/or father work in another city or province (35%), the grandchild's parents are separated (33%), the grandchild's mother

and/or father work abroad or are OFWs (11%), or the grandchild prefers to live with the OP than with his or her own parents (9%).

Summary, Conclusions, and Recommendations

The foregoing discussion demonstrates the high density of Filipino OPs' family networks, with multigenerational actors that include spouses, children, grandchildren, and siblings. A few OPs have surviving parents, which opens the possibility of some of them living in four-generation household structures. Clear gender variability exists, with older males more likely to have a spouse and more likely to be living with their spouse and at least one child, although there is an even number of surviving children across genders. Females, who are more likely to have outlived their partners, are more likely to live alone or live with their children and in other types of living arrangements.

The wide family networks of Filipino OPs can be viewed as positive ties from which OPs can draw support for their various needs, whether financial, material, emotional, or instrumental. Other than their spouses, OPs can largely rely on their children and grandchildren with whom they are most likely to co-reside. Grandchildren, particularly those entrusted to OPs' care and supervision, are mostly co-residing with OPs and thus can be tapped as a source of companionship and other kinds of support for OPs. Despite the protective effects of family relationships, some warn about the ambivalence of family relationships in old age (Widmer, Girardin, and Ludwig, 2017). Even well-intentioned family support does not always promote the well-being of older adults, as it often causes stress rather than comfort (Shor, Roelfs, and Yogev, 2013; Silverstein, Chen, and Heller, 1996; Thoits, 2011). If family support is perceived as overly intrusive, controlling, or dominating, it can foster resentment, resistance to behaviour change, and stress (Tucker, 2002). Both the OP who experiences diminishing autonomy and resources and family members who are implicated in providing care may experience strain and tension that reverberate throughout their family relationships (Hillcoat-Nallétamby and Phillips, 2011).

The descriptive nature of this study prevents us from drawing conclusions beyond the quantitative extent of OPs' family networks. The findings, however, open interesting questions, particularly about the quality of social networks in which older Filipinos are embedded. Further analysis can provide answers to questions such as the following: What is the extent to which negative family relationships prevail in OPs' highly dense family networks? What is the role played by OPs' vulnerable socioeconomic condition

marked by low income and poverty? What is the role of growing international labour migration in which women increasingly participate? Further analysis of these questions will better situate OPs' family networks in the context of ensuring successful ageing.

References

- Cruz, G.T. (2019), 'Are Filipino Older People Enjoying Longer Healthy Years?' Paper presented at the 2019 Philippine Population Association Scientific Conference, Taguig City, Philippines, 18 February.
- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito (2016), *Ageing in the Philippines: Findings from the 2007 Philippine Study on Ageing*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- 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. <https://doi.org/10.1016/j.ssmph.2016.11.009> (accessed 21 July 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.181–189.
- Government of the Philippines (1977), Presidential Decree No. 1083, Code of Muslim Personal Laws of the Philippines.
- Hillcoat-Nallétamby, S. and J.E. Phillips (2011), 'Sociological Ambivalence Revisited', *Sociology*, 45, pp.202–17. doi:10.1177/0038038510394018 (accessed 21 July 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 21 July 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 21 July 2019).

- Philippine Statistics Authority (2016), 2015 Census of Population Report Number 1–A National Capital Region (NCR) Population by Province, City, Municipality and Barangay. https://psa.gov.ph/sites/default/files/13_NCR.pdf (accessed 22 July 2019).
- Philippine Statistics Authority (2017a), 2015 Census of Population: Special Report on Housing Characteristics. <https://psa.gov.ph/sites/default/files/2015%20Special%20Report%20on%20Housing%20Characteristics.pdf> (accessed 22 July 2019).
- Philippine Statistics Authority (2017b), 'Philippine Population Surpassed the 100 Million Mark (Results from the 2015 Census of Population)'. <https://psa.gov.ph/content/philippine-population-surpassed-100-million-mark-results-2015-census-population> (accessed 22 July 2019).
- Philippine Statistics Authority and ICF (2018), Philippines National Demographic and Health Survey 2017. Quezon City, Philippines, and Rockville, MD: Philippine Statistics Authority and ICF.
- Romani, J.H. and M.L. Thomas (1954), *A Survey of Local Governments of the Philippines*. Manila, Philippines: University of the Philippines Institute of Public Administration.
- 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 21 July 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 21 July 2019).
- 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 21 July 2019).
- 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–P395. doi:10.1093/geronb/57.5.P387 (accessed 21 July 2019).
- 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 21 July 2019).

- United Nations, Department of Economic and Social Affairs (UNDESA), Population Division (2019), World Population Prospects 2019. <https://population.un.org/wpp/> (accessed 22 July 2019).
- United Nations, Department of Economic and Social Affairs (UNDESA), Population Division (2015a), World Population Ageing. New York, NY: United Nations.
- United Nations, Department of Economic and Social Affairs (UNDESA), Population Division (2015b), World Population Prospects: The 2015 Revision [DVD].
- Wibawa, T. (2018), 'The Philippines is one of two countries where divorce is illegal, trapping women in marriages', ABC News. <https://www.abc.net.au/news/2018-10-09/the-philippines-is-one-of-two-countries-where-divorce-is-illegal/10332600> (accessed 24 July 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.
- World Bank (2017), 'FAQs About the Pantawid Pamilyang Pilipino Program (4Ps)', Brief. <https://www.worldbank.org/en/country/philippines/brief/faqs-about-the-pantawid-pamilyang-pilipino-program> (accessed 21 July 2019).
- Zhang, L. (2015), 'Living Arrangements and Subjective Well-being Among the Chinese Elderly', *Open Journal of Social Sciences*, 3, pp.150–61.

Health Status

Josefina N. Natividad

The primary objective of the Longitudinal Study of Aging and Health in the Philippines (LSAHP) is to study the health status of older Filipinos, its correlates and determinants, and the health transitions that will ensue upon follow-up 2 years after the 2018 baseline survey. Health status can be described through a multiplicity of measures because health, based on the definition of the World Health Organization (WHO), consists of multiple dimensions. The LSAHP provides data on various aspects of health that will be of use in understanding the status of health and health transitions of older Filipinos. These data will provide the evidence base that can guide the crafting of appropriate programmes and policies to address the needs of this important and growing segment of the population.

Self-assessed Health

Self-assessed or self-rated health (SRH) is one of the most often used indicators of health in surveys on older adults and one of the oldest measures, having been around since the 1950s (Suchman, Philips, and Streib, 1958). To measure SRH, respondents are asked to rate their health on a 4- or 5-point scale, with the endpoints indicating the best and the poorest states. Because SRH has no clear objective referent, respondents are left to assess their health however they conceive it. Thus, SRH can be considered 'a summary statement about the way in which numerous aspects of health, both subjective and objective, are combined within the perceptual framework of the individual' (Tissue, 1972: 93).

Jylhä (2009) proposed that SRH be determined by an individual's consideration of a combination of biological and social processes that then converge into one assessment. SRH is not only determined by knowledge of one's medical condition and

the experience of physiological changes but also strongly influenced by one's social milieu and the assessment of one's state of health in relation to others of the same cohort, or of one's self at a prior point in time. It is not always strongly linked to age, but it is highly predictive of mortality. In one study of the old and very old, SRH was associated more with functional capacity, diagnoses of illness, and medications than with chronological age, which suggests that SRH may be 'more useful than age per se as an index of overall health' (Linn and Linn, 1980: 314). Using the United States Longitudinal Study on Aging, Lee (2000: 126) likewise reported that 'self-assessed global, physical, and mental health measures were predictive of functional decline and mortality in community-dwelling older adults.

In the LSAHP, SRH is elicited using a 5-point scale (1 = very healthy, 2 = healthier than average, 3 = of average health, 4 = somewhat unhealthy, 5 = very unhealthy). Results show that the most common self-assessment by older Filipino adults (about 4 in 10) is 'of average health', with the proportion slightly higher amongst women and the young old (60–69) (Table 4.1). About 3 in 10 assessed themselves as 'somewhat or very unhealthy', whilst 1 in 5 said they are either 'very healthy' or 'healthier than average'. Overall, women have better SRH than men, whilst the young old have better SRH than the middle (70–79) and oldest old (80+). Older person (OP) respondents had a more positive assessment of their health whilst growing up, with 68% claiming to have been very healthy, and 23% healthier than average.

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	7.6	12.2		11.4	9.3	4.5		10.3
Healthier than average	14.6	10.0		13.6	8.9	6.9		11.9
Of average health	46.3	48.4	n.s.	49.2	45.0	42.6	***	47.6
Somewhat unhealthy	29.1	26.6		23.9	33.6	38.7		27.6
Very unhealthy	2.4	2.9		1.9	3.2	7.3		2.7
N	2,193	3,255		3,613	1,397	437		5,447
While growing up (from birth to age 16)								
Very healthy	70.0	67.0		68.1	67.1	73.2		68.3
Healthier than average	22.7	22.9		22.5	24.2	20.6		22.8
Of average health	6.8	9.1	n.s.	8.7	7.7	5.6	n.s.	8.2
Somewhat unhealthy	0.2	0.9		0.6	0.8	0.6		0.6
Very unhealthy	0.3	0.1		0.2	0.1	0.1		0.1
N	2,196	3,259		3,614	1,400	439		5,454

***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Diagnosed Illnesses

The respondents were presented a list of diseases, mostly chronic in nature and prevalent amongst older adults, and asked if they had been told by a doctor that they currently have any of those diseases listed in the LSAHP questionnaire. Because the question is premised on a medical diagnosis, the possibility of underreporting is high given the differential access to healthcare in the country, but the likelihood of correct diagnosis is also higher for those who do have access to healthcare.

Following the suggestion of Zimmer, Natividad, Ofstedal, and Lin (2002), the diseases in the list are grouped into two. Group-1 diseases are not life-threatening and are recognisable to the respondent even without a medical diagnosis (arthritis, neuralgia, and rheumatism; chronic back pain; cataracts; fractures of the hip, thigh, and pelvis; and other fractures). Group-2 diseases require a medical diagnosis to be recognised by the respondent (Table 4.2).

The prevalence of the group-1 diseases is generally low. About 18% reported being told by a doctor that they have arthritis, 17% cataracts, and less than 3% chronic back pain or fractures. The proportion diagnosed with a group-1 disease is generally higher amongst women but with no consistent pattern by age.

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	13.9	20.3	n.s.	16.6	20.1	18.8	n.s.	17.7
Chronic back pain	2.0	2.8	n.s.	2.2	2.3	4.0	n.s.	2.5
Cataracts	12.8	19.5	*	12.4	24.7	23.2	***	16.8
Fractures of the hip, thigh and pelvis/ broken hip	2.0	2.7	n.s.	1.8	2.5	5.6	*	2.4
Other fractures	1.6	1.2	n.s.	1.1	1.8	1.7	n.s.	1.4
GROUP 2								
High blood pressure	38.4	50.3	***	43.4	49.5	47.7	n.s.	45.5
Angina/myocardial infarction, etc.	8.8	14.4	***	11.6	13.9	11.3	n.s.	12.2
Cerebrovascular disease (hemorrhage, infarction, stroke, etc.)	7.3	6.4	n.s.	6.2	7.2	8.7	n.s.	6.8
Diabetes	11.9	13.1	n.s.	12.7	14.0	9.1	n.s.	12.6
Respiratory illness (chronic, such as asthma, emphysema)	10.0	7.5	n.s.	6.2	12.4	12.4	***	8.5
Digestive illness (stomach or intestinal)	6.0	4.1	n.s.	5.0	4.7	4.8	n.s.	4.9
Renal or urinary tract ailments/kidney	9.4	13.4	n.s.	12.4	10.6	11.0	n.s.	11.8
Osteoporosis	0.2	0.9	n.s.	0.4	0.6	1.7	n.s.	0.6
Tuberculosis	6.8	2.3	**	4.1	4.7	2.7	n.s.	4.1
Ailments of the liver or gallbladder	2.3	1.7	n.s.	1.7	2.4	2.2	n.s.	2.0
Glaucoma	0.7	1.4	n.s.	1.0	1.1	1.6	n.s.	1.1
Cancer	0.7	0.7	n.s.	0.7	0.6	1.1	n.s.	0.7
Slipped disc	0.6	0.5	n.s.	0.5	0.6	0.6	n.s.	0.6
N	2,440	3,545		3,572	1,774	639		5,985

* $p < .05$. ** $p < .01$. *** $p < .001$. n.s. = not significant.
Source: Calculated by DRDF using original LSAHP data.

Of the group-2 diseases, hypertension has the highest prevalence (46%). Diabetes, angina or myocardial infarction, and renal or urinary ailments are the next highest although at much lower levels than hypertension, all below 13%. For all four most commonly reported diagnosed illnesses, the prevalence is higher for women but there is no discernible pattern by age.

About 4% of all respondents have had a heart attack, with no difference between the sexes, although the average age at heart attack is higher for men (mean of 63 years) than women (mean of 59 years) (Table 4.3). The percentage of those who have had a heart attack increases slightly with age as does the mean age at heart attack. Amongst those who have experienced a heart attack, only half were taking medication for their heart condition at the time of the survey, with the proportion highest amongst the oldest age cohort (67%).

Table 4.3. Experience of Heart Attack by Sex and Age

Diagnosed Illnesses	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Ever had a heart attack	3.1	3.9	n.s.	3.2	4.3	4.4	n.s.	3.6
N	2,411	3,574		3,760	1,552	673		5,985
Mean age experienced heart attack	63.40	58.79	n.s.	53.03	65.92	76.97	***	60.47
N	76	131		113	65	29		207
Currently taking medicine for heart condition	50.5	49.0	n.s.	48.3	44.4	66.6	n.s.	49.6
N	75	140		118	67	30		215

***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Oral Health

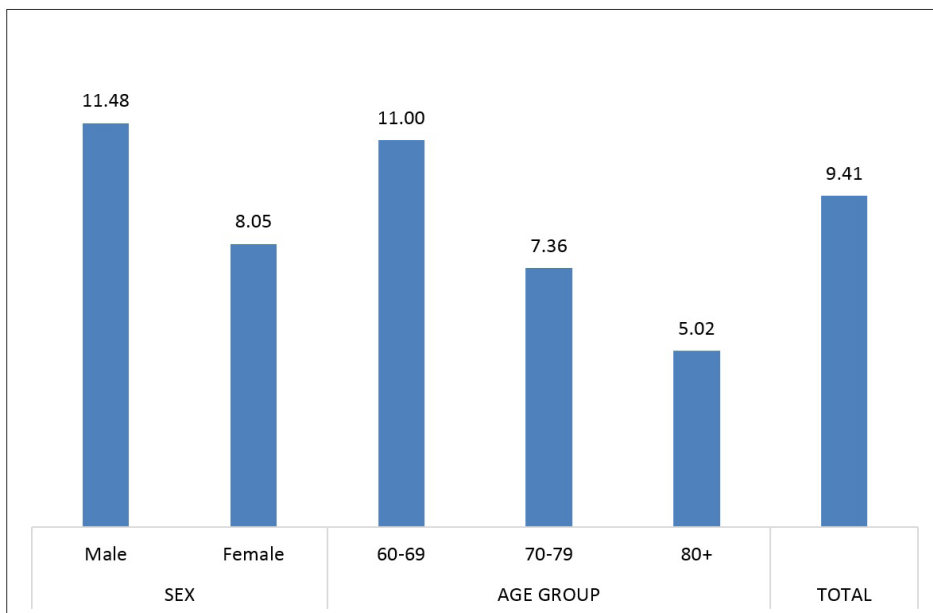
One of the most neglected areas of the study on health and well-being in the older years is oral health, yet oral health problems can have profound impacts on the quality of life and can be a risk factor for major diseases. For example, studies have shown a relationship between periodontal disease and diabetes (Borgnakke, Ylöstalo, Taylor, and Genco, 2013); cardiovascular diseases (Beck et al., 2005; Joshipura, Wand, Merchant, and Rimm, 2004); and possibly dementia and/or cognitive impairment (Gil-Montoya et al., 2014; Zuluaga, Montoya, Contreras, and Herrera, 2011). Furthermore, untreated caries and periodontal diseases can lead to edentulism or tooth loss, either partial or complete. In turn, edentulism is directly related to mastication or chewing and nutritional problems (Zhu and Hollis, 2014). Two major epidemiologic studies in the United States and the United Kingdom showed that edentulism was a risk factor for inadequate dietary intake (Nowjack-Raymer and Sheiham, 2003; Walls and Steele, 2004). Being toothless, with or without dentures, limited the consumption of healthier but harder-to-chew foods such as fruits and vegetables as well as proteins and micronutrients whilst increasing carbohydrate intake. Difficulties with chewing food also affect quality of life (Moynihan et al., 2009).

The retention of 20 natural teeth for good oral health is a goal advocated by the World Health Organization (WHO) (Fernandes and Chitre, 2008) and reiterated in The Global Goals for Oral Health 2020 (Hobdell, Petersen, Clarkson, and Johnson, 2003). This recommended goal is based on successful public health campaigns for improved oral health extending to the older years. One such programme cited by

WHO is the Government of Japan's 80/20 Movement, launched in 1989 to promote oral health with a target of having 20 natural teeth by age 80 (Chiu et.al., 2016; Nakayama and Mori, 2012; Shinsho, 2001; Global Review on Oral Health in Aging Societies, 2002). A newer concept, that of shortened dental arches, first proposed by Kayser (1990), refers to the loss of posterior teeth (molars and premolars). In this view, tooth loss has less severe consequences if the remaining teeth include occluding or antagonist premolar or molar pairs (Kanno and Carlson, 2006).

From the LSAHP results, it is immediately apparent that the state of oral health of older Filipinos is poor based on the goal of 20 original teeth, as the recorded average number of original teeth is only 9, with men having significantly more (average of 11) than women (8) (Table 4.4). The mean number of original teeth decreases steadily with age from 11 amongst the 60-69 age group to only 5 amongst the oldest age group, 80 years old and older. The mean number of occluding pairs will be presented in subsequent reports.

Figure 4.1 Mean Number of Natural Teeth by Sex and Age



Source: Calculated by DRDF using original LSAHP data.

Table 4.4. Oral Health by Sex and Age

Supplements	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean number of original teeth	11.48	8.05	***	11.00	7.36	5.02	***	9.41
N	2,289	3,484		3,657	1,490	626		5,773
% with no teeth	16.6	35.4	***	21.4	36.0	47.1	***	28.0
N	2,292	3,483		3,475	1,713	594		5,782
Mean number of functioning teeth	3.48	2.32	***	3.37	2.00	1.16	***	2.78
N	2,271	3,457		3,631	1,478	629		5,728
% who have dentures	19.3	40.1	***	28.6	38.1	34.3	n.s.	31.7
N	2,411	3,574		3,760	1,552	673		5,985
% who always use dentures when they eat	82.0	86.9	n.s.	89.3	81.3	80.3	*	85.7
N	464	1,435		1,077	591	232		1,900
% who are satisfied with their dentures	81.1	75.7	n.s.	80.6	72.3	72.2	n.s.	77.0
N	465	1,435		1,077	591	231		1,899

*p < .05. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAPH data.

In all, 28% of older Filipinos are completely edentulous or have no remaining natural teeth. The gender difference is marked; whilst 17% of men have no remaining original teeth, the comparative proportion for women is 35%. The proportion of those who are completely edentulous increases monotonically with age such that amongst the oldest age group, close to half (47%) have no remaining natural teeth.

The use of prosthesis or dentures alleviates the effects of the loss of original teeth. Results show that 32% of older Filipinos have dentures; the proportion is much higher amongst women (40%) than men (19%). But amongst those who have no original teeth and thus need dentures the most, only 60% have dentures (data not shown). This means that 4 in 10 of older Filipinos with no remaining natural teeth suffer the consequences of having no teeth at all, neither natural nor prosthesis. Results show that 86% of OPs always use their dentures when they eat and only 77% are satisfied with them.

Sleep

For the layperson, amongst the most often mentioned changes associated with getting on in years are the noticeable alterations in sleeping patterns. The common self-reported sleep complaints of OPs are difficulties in falling asleep and staying asleep, waking up too early, and not feeling rested after a night of sleep (Maggi et

al., 1998). Sleep-related daytime disturbances include daytime fatigue, excessive daytime sleepiness, and an increased likelihood of falling asleep during the day. Ageing is further associated with the tendency to fall asleep early and to wake up early. Furthermore, OPs are less tolerant of shifts in sleep-wake schedules such as those produced by shift work and jet lag (Vitiello, 2006).

In a meta-analysis of data from 2,391 adults aged 19–102, Ohayon, Carskadon, Guilleminault, and Vitiello (2004) confirmed four major age-related changes in sleep patterns: decreased total sleep time, decreased sleep efficiency, decreased slow-wave sleep, and more frequent wakefulness after sleep onset. These changes occur not only in the older years but gradually over the full adult life span. In the same study, analysis done only of older adults (60+) found that only sleep efficiency declined significantly from age 60–70 to 70 and over, and even then, only at a modest rate. This finding contradicts previous studies showing progressive age-related changes in sleep patterns in the older population. Vitiello (2006) attributed this to the strict criteria used by Ohayon et al. (2004) to select the sample for the meta-analysis, confining it to healthy older adults. In contrast, in other studies on sleep patterns of older adults using more heterogeneous samples that included both the healthy and unhealthy, findings indicate a higher prevalence of sleep disturbances such as excessive daytime sleepiness, regular napping, and disturbed sleep, which may be due to the presence of comorbidities and not to advanced age per se. Still, an age-related change is observed in both healthy and unhealthy older adults, which is a shift in the circadian rhythm towards an early sleep and wake-up time as well as a shorter sleep duration (Vitiello, 2006).

The shorter sleep duration in the older years is supported by the current data on older Filipinos, who report an average sleep duration of 6 hours (Table 4.5). There is no notable gender and age difference in mean sleep duration. Still, despite the seemingly shorter sleep duration, about 8 in 10 expressed satisfaction with their sleep.

Other common sleep-related disturbances are not highly prevalent; only 15% report having trouble falling asleep most of the time, and 15% say they have trouble with waking up during the night most of the time. Evidence of a shift in the circadian rhythm can be inferred from the relatively high prevalence (25%) of those who report waking up too early and being unable to fall asleep again most of the time. About half of all older Filipinos report feeling rested when waking up in the morning most of the time. At the other extreme, close to one in five rarely or never feels rested

upon waking up in the morning. There is no significant gender or age difference in this experience. Overall, only 1% report taking any medication or using treatments to induce sleep in the past 2 weeks.

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	6.16	6.18	n.s.	6.28	5.95	6.01	**	6.17
<i>N</i>	2,194	3,240		3,600	1,399	435		5,434
% who are satisfied with their sleep	82.8	81.6	n.s.	81.7	83.1	82.0	n.s.	82.1
<i>N</i>	2,161	3,144		3,504	1,370	431		5,305
Have trouble falling asleep								
Most of time	12.4	17.1		13.7	18.4	17.9		15.2
Sometimes	29.3	34.2	**	32.7	30.8	33.1	n.s.	32.2
Rarely	31.1	30.1		32.4	26.4	28.1		30.5
Never	27.2	18.6		21.2	24.4	21.1		22.0
<i>N</i>	2,170	3,257		3,590	1,396	438		5,424
Have trouble with waking up during the night								
Most of time	13.8	15.5	**	13.9	16.1	18.4		14.8
Sometimes	27.7	36.1		31.4	34.8	37.4	n.s.	32.8
Rarely	35.8	28.2		33.7	25.9	28.8		31.3
Never	22.6	20.2		21.1	23.2	15.5		21.2
<i>N</i>	2,171	3,254		3,589	1,398	437		5,424
Have trouble with waking up too early and not being able to fall asleep again								
Most of the time	23.7	26.0	n.s.	23.8	26.5	31.0		25.1
Sometimes	27.5	34.5		31.3	32.5	32.7	n.s.	31.7
Rarely	30.0	27.3		29.8	25.3	26.7		28.4
Never	18.8	12.2		15.1	15.7	9.7		14.8
<i>N</i>	2,170	3,256		3,588	1,399	439		5,426
Feels really rested when waking up in the morning								
Most of time	54.3	52.0	n.s.	52.9	53.4	52.1		52.9
Sometimes	26.8	28.6		27.3	29.1	28.3	n.s.	27.8
Rarely	16.4	16.2		17.2	13.9	16.0		16.3
Never	2.5	3.3		2.6	3.6	3.6		3.0
<i>N</i>	2,170	3,255		3,589	1,398	438		5,425
% who have taken any medications or used other treatments to help induce sleep in the past two weeks	0.7	1.5	*	0.8	1.3	3.3	**	1.2
<i>N</i>	2,411	3,570		3,757	1,551	673		5,981
% who take naps regularly	41.5	39.1	n.s.	32.8	50.1	57.6	***	40.1
<i>N</i>	2,410	3,573		3,760	1,552	672		5,984
Mean duration of naps (in minutes)	76.24	77.72	n.s.	68.88	81.33	94.86	***	77.10
<i>N</i>	977	1,349		1,197	757	373		2,327

* $p < .05$. ** $p < .01$. *** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Another age-related change in sleep is daytime napping; 40% of OPs say they nap regularly. There is a significant difference by age. Amongst the oldest cohort, 58% say they nap regularly; amongst the youngest (60–69), 33%. The mean nap duration also increases with age, from an average of 69 minutes amongst the 60–69 cohort to 95 minutes amongst the oldest (80+).

Pain

In recent years, a conspicuous increase in interest in pain and ageing has been evident in the rising number of publications on this topic. Underlying this interest is the rapid increase in the proportion of OPs in most countries and in the world's population, and the unique vulnerabilities of this age sector. Pain is not a normal consequence of ageing, but OPs are at greater risk of pain because they usually have the highest rates of surgery, hospitalisation, injury, and disease in the population (Gibson and Lussier, 2012).

In a review article on the epidemiology of pain amongst older adults, Helme and Gibson (2001) report that results from many studies on pain converge around the conclusion that its occurrence increases with age, but only up to the seventh decade. Pain in older adults is mainly a result of degenerative joint and spine diseases coupled with leg and foot disorders. The authors raised methodological concerns in interpreting studies on pain amongst older people, such as sample bias (e.g. too-small samples, non-probability samples, overrepresentation of community-dwelling older adults, and underrepresentation of the institutionalised); response bias (e.g. lack of comparable scales across studies); and age-associated physiologic changes in the pain pathways.

Other studies delve into the consequences of pain, especially the chronic kind, i.e. pain that is recurrent or persistent and lasts longer than 3 months. Generally, chronic pain can affect the ability to function and to perform activities of daily living. Pain of long duration is also often associated with adverse psychological outcomes. Studies have shown that chronic pain leads to mood disturbance, which in many cases exacerbates the experience of pain regardless of the pathophysiological cause. The longer the pain persists, the greater the likelihood of the individual becoming depressed, withdrawn, and irritable as well as having an overall poor quality of life. Depression has been identified as one of the consequences of long-term chronic pain (Gibson, Katz, Corran, Farrel, and Helme, 1994).

Research has shown too that not all pain has a physical origin; sometimes pain is the effect of severe emotional distress. In one study conducted with patients in a multidisciplinary clinic, about 15% of the older adult patients had no known organic cause for their pain but were primarily diagnosed with primary depression or ‘somatoform pain disorder, a condition where there is a preoccupation with pain not attributable to any other mental or physical disorder, or complaints of pain grossly in excess of what would be expected from any physical finding’ (Gibson et al., 1994: 130). Having pain of psychosomatic rather than organic cause does not make it any less distressing for the sufferer.

Pain is primarily a subjective experience; hence, the level of severity, as well as the tolerance for it, may be affected by individual differences. Some evidence shows that OPs may have a higher tolerance for pain because they expect it as a natural consequence of ageing and are therefore more stoic in bearing it (Gibson et al., 1994).

In the LSAHP, the pain question is, ‘Are you often troubled with pain?’ Although no specific time is referenced, the question implies that the pain is recurrent enough to be troublesome and thus suggests chronic pain. One in three (33%) older Filipinos reports being often troubled with pain, with about the same prevalence for men and women but increasing with age. More than half (58%) of those who are troubled with pain assess its severity to be moderate whilst 1 in 10 report being in severe pain (Table 4.6).

Table 4.6. Experience of Pain by Sex and Age

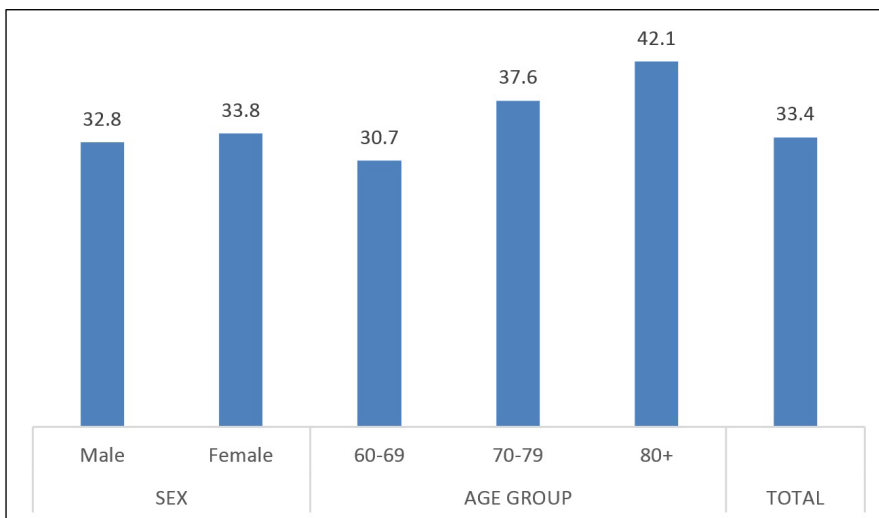
Pain Experience	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who are often troubled with pain	32.8	33.8	n.s.	30.7	37.6	42.1	**	33.4
N	2,195	3,258		3,615	1,400	439		5,454
Severity of pain experienced			n.s.				*	
Mild	31.6	31.6		35.9	22.8	30.8		31.6
Moderate	55.7	60.3		53.2	69.5	58.8		58.5
Severe	12.8	8.1		10.9	7.7	10.5		9.9
N	719	1,101		1,108	527	185		1,820
% who said pain make it difficult for them to do their usual activities	60.0	60.0	n.s.	58.8	61.8	61.9	n.s	60.0
N	718	1,101		1,107	526	186		1,819
Body parts that felt pain								
Head	45.5	44.2	n.s.	44.2	46.1	44.2	n.s.	44.7
Neck	9.0	14.8	n.s.	12.6	13.5	8.8	n.s.	12.5

Pain Experience	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Shoulders	48.8	51.6	n.s.	46.6	58.5	51.2	**	50.5
Back	17.7	30.8	*	25.3	27.9	21.2	n.s.	25.6
Lower back	21.1	23.6	n.s.	18.9	29.3	25.8	*	22.6
Joints of the hands/arms	21.8	32.0	***	28.1	30.2	20.8	n.s.	28.0
Hip joint	6.3	6.2	n.s.	5.4	7.7	6.6	n.s.	6.2
Others (knees, ankles, feet, etc.)	22.6	18.2	n.s.	21.5	17.0	18.9	n.s.	19.9
<i>N</i>	720	1,101		1,109	527	185		1,821

*p < .05. **p < .01. ***p < .001. n.s. = not significant.
 Source: Calculated by DRDF using original LSAHP data.

Six in ten of those who are troubled with pain say that the pain makes it difficult for them to do their usual activities. The body parts most often reported as the sites of pain are the shoulders (51%), head (45%), joints of the hands (28%), back (26%), and lower back (23%).

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



Source: Calculated by DRDF using original LSAHP data.

Falls

A highly prevalent health risk amongst older adults is the risk of falls. Falls are a leading cause of fatal and nonfatal injuries in this age group. Falls can lead to hospitalisation and impairment in the ability to perform activities of daily living, thus negatively

affecting the quality of life. Amongst the risk factors for falls reported in several studies are older age, less walking, presence of comorbidities and disabilities, severe psychological distress, or poorer health in general (Qin and Baccaglini, 2016). Impaired balance and gait, polypharmacy, and a history of previous falls are other major risk factors for falls in older adults (Ambrose, Paul, and Hausdorff, 2013).

Other studies suggest that the risk of falls may also be related to age-associated declines in cognitive function. Specifically, studies have shown that executive function, which ‘involves the ability to think abstractly and to plan, initiate, sequence, monitor, and stop complex behavior’ (American Psychiatric Association, 1994: 135), may play an essential role in the regulation of gait (or manner of walking). Age-associated decline in physical coordination can be exacerbated when the OP who needs to navigate complex everyday situations (e.g. talking whilst walking, crossing a busy street, or walking on uneven surfaces) suffers from impaired executive function and thus has a compromised ability to maintain a fall-free gait. In a 5-year prospective study of community-dwelling elderly, Mirelman and colleagues (2012) demonstrated that the risk of future falls was predicted by performance in executive function and attention tests 5 years earlier. Better performance in executive function and attention tests were associated with a lower risk of falls after controlling for age, sex, and fall history.

LSAHP respondents were asked whether they had had a fall in the last 12 months and, if they had, how many times they had fallen in that period. In all, 19% report a fall in the past 12 months, with an average of 1.7 falls during that period (Table 4.7).

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	18.5	20.0	n.s.	18.7	20.3	21.3	n.s.	19.4
N	2,407	3,571		3,756	1,549	672		5,977
Mean number of times fallen in the past 12 months	1.89	1.62	n.s.	1.59	1.91	2.01	**	1.73
N	444	711		698	314	143		1,155
% who injured self seriously enough to need medical treatment	18.0	13.4	n.s.	12.5	17.5	23.1	n.s.	15.1
N	445	714		703	314	143		1,160

**p < .01. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

The average frequency of falls increases with age. The oldest cohort (80+) report an average of two falls in 12 months. Of those who had had a fall, 15% report being injured seriously enough to need medical treatment.

Incontinence

Like pain, urinary incontinence is not a normal part of ageing, but its prevalence tends to increase with age. According to Resnick (1987), certain changes in the urinary system occur with advancing age – primarily an increased likelihood of involuntary bladder contractions; changes in the pattern of fluid excretion so that OPs excrete more of their daily fluid intake at night (after 8 or 9 pm), resulting in a higher likelihood of awakening at night to urinate; shrinkage of the bladder; and decline in the strength of the urethral sphincter. None of these changes alone causes incontinence, ‘but each reduces the reserve capacity of the lower urinary tract to withstand an additional insult’ (Resnick, 1987: 68). Such additional insult can be in the form of medications that OPs are more likely to be taking and comorbidities that OPs are more likely to have.

The consequences of urinary incontinence depend on its severity, both real and perceived. Incontinence may cause social and psychological problems if the OP shies away from social activities and from going out in public for fear of embarrassment or social stigma. Despite this, many older adults do not seek help for urinary incontinence, which may be because they assume that it is ‘an inevitable, irreversible, and normal part of ageing’ (Stoddart, Donovan, Whitley, Sharp, and Harvey, 2001: 548). Urine and faecal incontinence are likely to be more prevalent amongst the oldest age group, those in long-term care, or those with multiple morbidities.

Questions on incontinence in the LSAHP asked about the loss of bladder and bowel control and the frequency of its occurrence. The question was also asked of the proxy respondent. In all, more than 8 in 10 (82%) older Filipinos report no loss of control in either bladder or bowel movement; hence, incontinence is not highly prevalent (Table 4.8). Still, urinary incontinence is the most prevalent form of incontinence at 11% (12% in women and 9% in men) and increases with age; 4% of older Filipinos have loss of both bowel and bladder control, and 2% have loss of bowel control only.

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	4.3	4.6		3.2	4.3	12.0		4.5
Bladder control only	9.2	12.2	n.s.	9.2	13.3	16.0	***	11.0
Bowel movement control only	2.1	2.0		2.1	1.8	2.5		2.0
No loss of control	84.5	81.2		85.6	80.6	69.5		82.5
N	2,409	3,568		3,759	1,551	667		5,977
Frequency								
Very often	12.4	10.2		8.3	11.8	16.6		11.0
Often	16.4	16.6		16.5	13.5	21.0		16.5
Sometimes	29.6	33.8	n.s.	30.3	35.4	33.1	n.s.	32.3
Seldom	21.9	28.8		28.7	28.5	16.9		26.3
Very seldom	19.8	10.7		16.2	10.8	12.5		13.9
N	375	677		542	302	209		1,053

***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Mental Health

Depression

Depression has been identified by WHO as one of the major contributors to global disability. It is known to affect people of all ages, but findings on the age pattern of prevalence have been mixed and sometimes contradictory. For example, in the 2017 WHO estimates of the global prevalence of depression across age groups, the prevalence peaks at ages 55–74 and drops thereafter (WHO, 2017). Sutin et al. (2013), using data from the Baltimore Longitudinal Study on Aging, reported a curvilinear pattern with a high prevalence in young adulthood, a dip in middle adulthood, and a rise in old age. Most studies find a gender difference, with more women depressed than men, although the gender gap narrows in the older ages. Still, there is a consensus in the literature that depression or depressive symptoms may be higher in the older years because of the many possible age-related triggers such as health problems, bereavement from the loss of loved ones, and retirement. In the LSAHP, depressive symptoms were measured using the 11-item version of the 20-item Center for Epidemiologic Studies Depression (CES-D) scale first used by Kohout, Berkman, Evans, and Cornoni-Huntley (1993). The scoring is as follows: 0 = rarely/not at all, 1 = some of the time, and 2 = all the time. The total possible score

is 22. Results show that older Filipinos have an average score of 5, significantly higher amongst women and highest amongst the oldest age group (6).

Table 4.9. Mean Depressive Scores of Older Filipinos by Sex and Age

CES-D	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean depression score	4.70	5.55	***	5.09	5.25	6.00	n.s.	5.21
N	2,195	3,259		3,615	1,400	439		5,454

***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Health Risk Behaviours

Smoking

Smoking is a known risk factor for many chronic diseases, including cancer and coronary heart disease. Generally, the prevalence of smoking is lower amongst older adults than amongst younger ones. This may be attributed to the earlier mortality of smokers, resulting in fewer smokers reaching older adulthood. Lower smoking prevalence in older adults may also be attributed to the high rates of quitting the habit in this age group due to the onset of chronic diseases caused or aggravated by smoking. Amongst these diseases are emphysema, chronic obstructive pulmonary disease, and heart disease.

In general, the LSAHP results support these findings, as only 17% of respondents are current smokers whilst 32% are former smokers (Table 4.10). Current smoking is clearly gender differentiated; 30% of men currently smoke compared with only 9% of women. The prevalence of current smoking is lowest amongst the oldest old (11%). Amongst current smokers, the average number of cigarettes smoked daily is 9, and higher amongst male smokers (11) than female smokers (7). Current smokers started smoking at an average age of 21, younger amongst males than females (17 years vs. 28 years).

Former smokers are also overwhelmingly male. They smoked more cigarettes on average (16) than current smokers. The average age at which they quit smoking is 52 years.

Table 4.10. 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	29.7	8.6	***	19.6	13.4	11.1	***	17.1
N	2,411	3,574		3,760	1,551	673		5,985
Mean number of cigarettes/cigars smoked per day	10.62	6.51	***	9.28	9.72	9.52	n.s.	9.39
N	716	306		738	208	75		1,022
Mean age started smoking	17.46	27.86	***	19.97	22.41	21.18	n.s.	20.55
N	710	300		738	208	64		1,010
B. Former smokers								
% who used to smoke	66.9	13.4	***	31.0	32.1	34.0	n.s.	31.7
N	1,695	3,268		3,022	1,343	598		4,963
Mean number of cigarettes/cigars smoked per day	18.39	9.31	***	16.44	15.55	13.86	n.s.	15.86
N	1,134	437		937	431	203		1,571
Mean age started smoking	18.09	28.44	***	19.96	21.98	23.18	**	20.91
N	1,124	420		932	422	190		1,544
Mean age stopped smoking	52.53	52.10	n.s.	48.49	56.41	62.59	***	52.41
N	1,125	410		924	418	192		1,535

p < .01. *p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Drinking

Much of the concern about drinking behaviour focuses on alcohol abuse or excessive drinking for its obvious health and social implications. But the study of drinking behaviour and its consequences in older adults may need to shift focus from excessive drinking to drinking behaviour per se, regardless of the level of consumption. Because of age-related changes in physiology and interactions of alcohol use with comorbidities and with medication, even lower levels of alcohol consumption may produce adverse outcomes (Moore et al., 1999).

To gauge drinking behaviour amongst older Filipinos, respondents were asked whether they currently drink alcohol and how frequently. Overall, only 29% report they are currently drinking. As with smoking, current drinking is much higher amongst men (49%) than women (15%) (Table 4.11). There is a steep age-related decline in the prevalence of current drinking. As to frequency, a little over half report being only occasional drinkers whilst, at the other extreme, 5% of current drinkers report drinking every day or almost every day. Significantly more males than females currently drink alcohol daily (7% vs. 1%). Males started drinking at an average age of 20 compared with 37 amongst females.

As with smokers, the proportion of former drinkers is higher than that of current drinkers. The mean age at which they stopped drinking is 56 years.

Table 4.11. 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	49.4	14.8	***	33.3	24.5	13.1	***	28.8
N	2,411	3,574		3,760	1,552	673		5,985
On average, frequency drinking alcohol among current alcohol drinkers								
(Almost) everyday	7.3	0.7		5.4	5.0	4.3		5.3
Once every two or three days	11.0	2.6		9.5	5.7	4.6		8.4
Once a week	14.4	6.7	**	11.4	11.6	22.7	n.s.	12.0
Once or twice a month	17.0	10.0		15.2	16.0	4.5		14.8
Less than once a month	3.4	2.9		3.2	2.8	5.7		3.3
Occasional	47.0	77.0		55.3	58.8	58.0		56.2
N	1,192	528		1,252	380	88		1,720
Mean age started drinking regularly among those who are current alcohol drinkers								
	20.17	36.52	***	24.57	26.52	26.31	n.s.	25.08
N	1,183	507		1,241	362	87		1,690
B. Former drinkers								
% who used to drink	78.6	15.8	***	33.0	35.2	33.8	n.s.	33.7
N	1,220	3,045		2,507	1,172	585		4,264
Mean age started drinking regularly among those who used to drink alcohol								
	19.96	33.83	***	24.08	25.75	23.91	n.s.	24.54
N	944	466		817	407	185		1,410
Mean age stopped drinking regularly among those who used to drink alcohol								
	55.91	56.40	n.s.	53.08	57.30	66.10	***	56.07
N	920	453		793	392	189		1,373

p < .01. *p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSHP data.

Objective Measures of Health

The inclusion of objective measures in ageing surveys is increasingly becoming standard practice. These measures can complement, supplement, or cross-validate the information obtained from self-reports and subjective assessments. The measures provide additional information about respondents that can be analysed separately on its own merit, not in relation to the survey responses. The most common of these measures are the anthropometric ones, which are a set of quantitative measurements that assess the composition of the body. The core elements of anthropometry are height, weight, waist circumference, and skinfold

Indicators	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Side-by-side	97.4	98.6	**	98.5	98.4	95.0	***	98.1
<i>N of cases</i>	2,175	3,312		3,587	1,380	490		5,486
Semi tandem	96.0	92.2	**	97.3	91.4	72.7	***	93.7
<i>N of cases</i>	2,132	3,194		3,561	1,301	464		5,326
Tandem	83.0	67.0	**	81.2	61.5	39.5	***	73.5
<i>N of cases</i>	2,023	2,946		3,419	1,188	363		4,970
Gait speed								
% who were able to perform gait speed	92.0	93.1	n.s.	94.9	92.8	79.3	***	92.6
<i>N of cases</i>	2,411	3,573		3,760	1,552	674		5,985
Mean duration (sec)	10.62	11.67	*	9.94	12.69	16.17	***	11.25
<i>N of cases</i>	2,217	3,325		3,568	1,441	534		5,542

*p < .05. **p < .01. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Body Mass Index

Body mass index (BMI) is a measure of nutritional status in adults and is derived by dividing the person's weight in kilograms by the height in metres squared (kg/m²). WHO (n.d.) recommends BMI cut-off values to demarcate underweight (< 18.5), normal weight (18.5–24.99), overweight (25–29.99), and obese (≥ 30). By these standards, 56% of older Filipinos fall within the normal BMI range, with a significantly higher proportion of men (64%) than women (50%) (Table 4.12). The proportions at either end of the range are both low, although more older Filipinos are underweight (14%) than obese (8%). The proportion who are underweight increases progressively with age, whilst the proportions of overweight and obese decrease with age. Overall, more men are underweight whilst more women are overweight or obese.

Other researchers have suggested alternatives to the BMI as a summary measure of nutritional status, arguing that the BMI does not consider age-related changes in the relative distribution of body fat (mainly an increase in central adiposity) and the loss of lean body mass, amongst others. One of the simplest measures of excess body fat is waist circumference. The WHO-recommended cut-off for obesity is a waist circumference equal to or higher than 102 cm (40 inches) for men and 88 cm (34.5 inches) for women. Using these cut-offs, 7% of men and 55% of women are obese (data not shown).

The cut-offs for BMI and waist circumference have been developed for all ages, but there are concerns that these may not be applicable to the older population

(Babiarczyk and Turbiarz, 2012). Andres (1985) reported that the BMI values associated with the lowest mortality increase with age. This became the basis of the recommendation for age-adjusted desirable BMI in relation to age (National Research Council, 1989). At age 65 and over, the report recommends a BMI range of 25–29. This range is consistent with findings from a meta-analysis of studies on the predictors of mortality and major chronic diseases, including diabetes, hypertension, and cardiovascular diseases; studies using the BMI as a predictor reported that ‘the optimal BMI range for the lowest mortality was overweight and mildly obese’ (Chang, Beason, Hunleth, and Colditz, 2012).

Whilst a higher BMI may be protective at older ages, being underweight is a risk factor for mortality. The relationship between mortality and body weight is curvilinear, with elevated risk at both under- and overweight. The BMI profile of older Filipinos suggests that underweight is more prevalent than obesity, but both conditions need attention.

Grip strength is one of the performance measures in the LSAHP. Measured via a hand-held dynamometer, grip strength value is recorded in kilograms. An indicator of overall strength, grip strength is related to nutritional status, muscle mass, and functional and physical health status. Many studies have confirmed its predictive value for mortality, physical function, and length of hospital stay (Bohannon, 2008). Results on grip strength for older Filipinos show the same age and gender differentiation observed in other populations – that is, the mean grip strength declines with age and men have significantly higher values than do women.

The LSAHP results show that older Filipinos registered a much lower grip strength than similar samples of older adults in Brazil (Amaral et al., 2019); Singapore (Malhotra et al., 2016); Japan (Seino et al., 2014); and Hong Kong (Auyeung, Lee, Leung, Kwok, and Woo, 2014).

The other objective measures of health, such as the mean waist circumference, arm length, balance test, and gait speed, can be used for further studies on conditions such as frailty and sarcopenia.

Summary, Conclusions, and Recommendations

In keeping with its primary objective to study the health of older Filipinos, the LSAHP contains multiple indicators of health status classifiable into three broad categories: self-rating (e.g. SRH); self-reports (e.g. diagnosed illness, experience of pain, oral health); and objective measures (e.g. height, weight, waist circumference, grip strength, functional reach, balance test, gait speed, and peak flow).

Self-rating requires the individuals to evaluate their status on a given indicator using their own judgment as they are not provided any referents with which to compare themselves. For SRH, most older Filipinos assessed themselves to be of average or better than average health. Looking at the extreme end of SRH, the percentage who are very unhealthy increases with age. Evidently, increasing age has highly different implications for how older Filipinos assess themselves, depending on what aspect of their lives they are evaluating. This is something to be investigated in further analyses of the LSAHP data.

Amongst the self-reported diseases included in the survey, the most common diagnosed illnesses are hypertension, arthritis, cataracts, diabetes, angina and heart disease, and renal and urinary tract illness, in that order. By confining the self-report to diseases that have been diagnosed by a physician, the true prevalence of these illnesses cannot be deduced from the LSAHP data, but the list gives a fair picture of the most common diseases experienced by older Filipinos. The observed differences in prevalence by sex and by age for some of these diseases will have to be further investigated to tease out the effects of health-seeking behaviour from the true prevalence, as the capability to obtain a medical diagnosis is not equal for all older adults. One worrisome finding is that of those who have had a heart attack, only half are taking medication for their heart condition. This is a health concern that will need to be addressed urgently.

The oral health status of older Filipinos is generally poor. Compared with the goal of retaining 20 natural teeth into the older years as advocated by Japan's 80/20 Movement, which WHO cites as worth emulating, the data show many older Filipinos falling short of this goal, with an average of only 9 remaining natural teeth; the number is higher amongst men and decreases with age.

On the average, older Filipinos sleep for 6 hours, with about a third regularly taking a daytime nap. About 3 in 10 report that they are often troubled with pain; of these, about half report the pain to be of moderate intensity. Half of those often troubled with pain say the pain makes it difficult for them to do their usual activities.

A small percentage had a fall in the 12 months preceding the survey, with an average of about two falls in the past year; this number is higher amongst men and increases with age. Amongst those who had a fall, 15% were injured seriously enough to need medical treatment. Incontinence, most commonly urinary incontinence, was reported by 2 in 10 older Filipinos; it is more prevalent amongst women than men. Using the 11-item CES-D scale (range = 0–22), older Filipinos have a mean depression score of 5; the score is higher amongst women and increases with age.

Two health risk behaviours are included in the survey: smoking and drinking. Results show that both behaviours are much more prevalent amongst men. Only 17% of older Filipinos currently smoke, with the prevalence decreasing as age increases. The prevalence of drinking is higher (29% currently drink), again decreasing with increasing age.

The objective measures are highly useful in drawing a picture of older Filipinos' overall health. Individual height and weight data were transformed into BMI and compared with WHO cut-off scores. Results show that more than half of older Filipinos fall within the normal BMI cut-offs. A little more than 1 in 10 are underweight whilst 8% are obese. More men are underweight whilst more women are overweight or obese. The percentage of underweight increases with age whilst the percentage of overweight or obese decreases as age increases. Measures of grip strength show that older Filipinos, on average, have weaker grip strength than their counterparts in Japan, Singapore, and Hong Kong.

This wealth of information on various dimensions of the health status of the current population of older Filipinos must be further analysed to better understand how the individual measures, alone or in combination, affect mortality risk as well as the overall quality of life. With good-quality data such as that provided by the LSHP, programmes and policies for addressing the health concerns of older Filipinos will be better informed, be more evidence based, and can thus be tailored to the real needs of this sector.

References

- Amaral, C.A., T. L.M. Amaral, G. Torres, R. Monteiro, M.T.L. Vasconcellos, and M.C. Portela (2019), 'Hand Grip Strength: Reference Values for Adults and Elderly People of Rio Branco, Acre, Brazil', *PLoS ONE*, 14(1), p.e02111452. <https://doi.org/10.1371/journal.pone.0211452> (accessed 12 July 2019).
- Ambrose, A.F., G. Paul, and J.M. Hausdorff (2013), 'Risk Factors for Falls Among Older Adults: A Review of the Literature', *Maturitas*, 75(1), pp.51–61. doi:10.1016/j.maturitas.2013.02.009 (accessed 24 June 2019).
- American Psychiatric Association (1994), *Diagnostic and Statistical Manual of Mental Disorders [DSM-IV]* (4th ed.). Washington, DC: American Psychiatric Association.
- Andres, R. (1985), 'Mortality and Obesity: The Rationale for Age-specific Height-Weight Tables', in R. Andres and W. R. Hazzard (eds.), *Principles of Geriatric Medicine*. New York, NY: McGraw-Hill, pp.311–18.
- Auyeung, T.W., S.W. J. Lee, J. Leung, T. Kwok, and J. Woo (2014), 'Age-associated Decline of Muscle Mass, Grip Strength and Gait Speed: A 4-year Longitudinal Study of 3018 Community-dwelling Older Chinese', *Geriatrics and Gerontology International*, 14(Suppl. 1), pp.76–84.
- Babiarczyk, B. and A. Turbiarz (2012), 'Body Mass Index in Elderly People – Do the Reference Ranges Matter?' *Progress in Health Sciences*, 12(1), pp.58–67. <https://pdfs.semanticscholar.org/c9cd/bf63916cbfda852b1dfc78d748a23e04bcb3.pdf> (accessed 11 July 2019).
- Beck, J.D. et al. (2005), 'Periodontal Disease and Coronary Heart Disease: A Reappraisal of the Exposure', *Circulation*, 112(1), pp.19–24. <https://doi.org/10.1161/CIRCULATIONAHA.104.511998> (accessed 10 July 2019).
- Bohannon, R.W. (2008), 'Hand-grip Dynamometry Predicts Future Outcomes in Aging Adults', *Journal of Geriatric Physical Therapy*, 31(1), pp.3–10. https://journals.lww.com/jgpt/Fulltext/2008/31010/Hand_Grip_Dynamometry_Predicts_Future_Outcomes_in.2.aspx#pdf-link (accessed 11 July 2019).
- Borgnakke, W.S., P.V. Ylöstalo, G.W. Taylor, and R.J. Genco (2013), 'Effect of Periodontal Disease on Diabetes: Systematic Review of Epidemiologic Observational Evidence', *Journal of Clinical Periodontology*, 40(Suppl. 14), pp.S135–52. doi:10.1111/jcpe.12080 (accessed 11 July 2019).
- Casadei, K. and J. Kiel (2019), 'Anthropometric Measurement (Updated 2019 Mar 24)', StatPearls (Internet). Treasure Island, FL: StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK537315/> (accessed 11 July 2019).

- Chang, S.H., T.S. Beason, J.M. Hunleth, and G.A. Colditz (2012), 'A Systematic Review of Body Fat Distribution and Mortality in Older People', *Maturitas*, 72, pp.175–91. <http://dx.doi.org/10.1016/j.maturitas.2012.04.004> (accessed 12 July 2019).
- Chiu, C. et al. (2016), 'Dental Health Status of Community-dwelling Older Singaporeans: Findings from a Nationally Representative Survey', *Gerodontology*, 34(1), pp.57–67. doi:10.1111/ger.12218 (accessed 12 July 2019).
- Fernandes, V.A. and V. Chitre (2008), 'The Shortened Dental Arch Concept: A Treatment Modality for the Partially Dentate Patient', *The Journal of Indian Prosthodontic Society*, 8(3), pp.134–39. doi:10.4103/0972-4052.49016 (accessed 12 July 2019).
- Gibson, S.J., B. Katz, T.M. Corran, M.J. Farrell, and R.D. Helme (1994), 'Pain in Older Persons', *Disability and Rehabilitation*, 16(3), pp.127–39. doi:10.3109/09638289409166289 (accessed 31 May 2019).
- Gibson, S.J., and D. Lussier (2012), 'Prevalence and Relevance of Pain in Older Persons', *Pain Medicine*, 13(suppl 2), pp.S23–26. doi:10.1111/j.1526-4637.2012.01349.x (accessed 20 September 2019).
- Gil-Montoya, J.A., I. Sanchez-Lara, C. Carnero-Pardo, F. Fornieles, J. Montes, R. Vilchez, and M. Bravo (2014), 'Is Periodontitis a Risk Factor for Cognitive Impairment and Dementia? A Case-control Study', *Journal of Periodontology*, 86(2), pp.244–53. doi:10.1902/jop.2014.140340 (accessed 10 July 2019).
- Helme, R.D. and S.J. Gibson (2001), 'The Epidemiology of Pain in Elderly People', *Clinics in Geriatric Medicine*, 17(3), pp.417–31. doi:10.1016/s0749-0690(05)70078-1 (accessed 10 July 2019).
- Helme, R.D., B. Katz, M. Neufeld, S. Lachal, J. Herbert, and T. Corran (1989), 'The Establishment of a Geriatric Pain Clinic – A Preliminary Report of the First 100 Patients', *Australian Journal of Ageing*, 8, pp.27–30.
- Hobdell, M., P.E. Petersen, J. Clarkson, and N. Johnson (2003), 'Global Goals for Oral Health 2020', *International Dental Journal*, 53(2), pp.285–88.
- Joshipura, K.J., H.C. Wand, A.T. Merchant, and E.B. Rimm (2004), 'Periodontal Disease and Biomarkers Related to Cardiovascular Disease', *Journal of Dental Research*, 83(2), pp.151–5. doi:10.1177/154405910408300213 (accessed 10 July 2019).
- Jylhä, M. (2009), 'What is Self-rated Health and Why Does It Predict Mortality? Towards a Unified Conceptual Model', *Social Science & Medicine*, 69(3), pp.307–16. doi:10.1016/j.socscimed.2009.05.013 (accessed 07 June 2019).
- Kohout, F.J., L.F. Berkman, D.A. Evans, and J. Cornoni-Huntley (1993), 'Two Shorter Forms of the CES-D Depression Symptoms Index', *Journal of Aging and Health*, 5(2), pp.179–93. doi:10.1177/089826439300500202 (accessed 12 July 2019).

- Lee, Y. (2000), 'The Predictive Value of Self-assessed General, Physical, and Mental Health on Functional Decline and Mortality in Older Adults', *Journal of Epidemiology & Community Health*, 54(2), pp.123–29. doi:10.1136/jech.54.2.123 (accessed 7 June 2019).
- Linn, B.S. and M.W. Linn (1980), 'Objective and Self-assessed Health in the Old and Very Old', *Social Science & Medicine. Part A: Medical Psychology & Medical Sociology*, 14(4), pp.311–15. doi:10.1016/s0271-7123(80)90223-0 (accessed 7 June 2019).
- Maggi, S., J.A. Langlois, N. Minicuci, F. Grigoletto, M. Pavan, D.J. Foley, and G. Enzi (1998), 'Sleep Complaints in Community-dwelling Older Persons: Prevalence, Associated Factors, and Reported Causes', *Journal of the American Geriatrics Society*, 46(2), pp.161–68. doi:10.1111/j.1532-5415.1998.tb02533.x (accessed 31 May 2019).
- Malhotra, R., S. Ang, J.C. Allen, N.C. Tan, T. Østbye, Y. Saito, and A. Chan (2016), 'Normative Values of Hand Grip Strength for Elderly Singaporeans Aged 60 to 89 Years: A Cross-sectional Study', *JAMDA*, 17, pp.864.e1–864.e7. <http://dx.doi.org/10.1016/j.jamda.2016.06.013> (accessed 12 July 2019).
- Mirelman, A., T. Herman, M. Brozgol, M. Dorfman, E. Sprecher, A. Schweiger, and J.M. Hausdorff (2012), 'Executive Function and Falls in Older Adults: New Findings from a Five-year Prospective Study Link Fall Risk to Cognition', *PLoS ONE*, 7(6), p.e40297. doi:10.1371/journal.pone.0040297 (accessed 12 July 2019).
- Moore, A.A. et al. (1999), 'A New Paradigm for Alcohol Use in Older Persons', *Medical Care*, 37(2), pp.165–79. <https://www.jstor.org/stable/3767222> (accessed 12 July 2019).
- Moynihan, P., M. Thomason, A. Walls, K. Gray-Donald, J.A. Morais, H. Ghanem, and J. Feine (2009), 'Researching the Impact of Oral Health on Diet and Nutritional Status: Methodological issues', *Journal of Dentistry*, 37(4), pp.237–49. doi:10.1016/j.jdent.2008.12.003 (accessed 12 July 2019).
- National Research Council (1989), *Diet and Health: Implications for Reducing Chronic Disease Risk*. Washington, DC: National Academies Press. <https://doi.org/10.17226/1222> (accessed 10 July 2019).
- Nowjack-Raymer, R.E. and A. Sheiham (2003), 'Association of Edentulism and Diet and Nutrition in US Adults', *Journal of Dental Research*, 82(2), pp.123–26. doi:10.1177/154405910308200209 (accessed 10 July 2019).
- Ohayon, M.M., M.A. Carskadon, C. Guilleminault, and M.V. Vitiello (2004), 'Meta-analysis of Quantitative Sleep Parameters from Childhood to Old Age in Healthy Individuals: Developing Normative Sleep Values Across the Human Lifespan', *Sleep*, 27(7), pp.1255–73. doi:10.1016/j.jsmc.2006.04.007 (accessed 10 July 2019).

- Qin, Z. and L. Baccaglini (2016), 'Distribution, Determinants, and Prevention of Falls Among the Elderly in the 2011–2012 California Health Interview Survey', *Public Health Reports*, 131(2), pp.331–39. doi:10.1177/003335491613100217 (accessed 11 July 2019).
- Resnick, N.M. (1987), 'Urinary Incontinence', *Public Health Reports* (1974–), 102, pp.67–70. <http://www.jstor.org/stable/4628227> (accessed 12 July 2019).
- Seino, S. et al. (2014), 'Reference Values and Age and Sex Differences in Physical Performance Measures for Community-dwelling Older Japanese: A Pooled Analysis of Six Cohort Studies', *PLoS ONE*, 9(6), p.e99487. doi:10.1371/journal.pone.0099487 (accessed 12 July 2019).
- Shinsho, F.F. (2001), 'New Strategy for Better Geriatric Oral Health in Japan: 80/20 Movement and Healthy Japan 21', *International Dental Journal*, 51(S3), pp.200–06. doi:10.1002/j.1875-595x.2001.tb00867.x (accessed 12 July 2019).
- Stoddart, H., J. Donovan, E. Whitley, D. Sharp, and I. Harvey (2001), 'Urinary Incontinence in Older People in the Community: A Neglected Problem?' *British Journal of General Practice*, 51, pp.548–54. <https://bjgp.org/content/bjgp/51/468/548.full.pdf> (accessed 12 July 2019).
- Suchman, E.A., B.S. Philips, and G.F. Streib (1958), 'An Analysis of the Validity of Health Questionnaires', *Social Forces*, 36(3), pp.223–32. <http://www.jstor.org/stable/2573809> (accessed 17 July 2019).
- Sutin, A.R., A. Terracciano, Y. Milaneschi, Y. An, L. Ferrucci, and A.B. Zonderman (2013), 'The Trajectory of Depressive Symptoms Across the Adult Life Span', *JAMA Psychiatry*, 70(8), pp.803–11. doi:10.1001/jamapsychiatry.2013.193 (accessed 11 July 2019).
- Tissue, T. (1972), 'Another Look at Self-rated Health Among the Elderly', *Journal of Gerontology*, 27(1), pp.91–94. doi:10.1093/geronj/27.1.91 (accessed 7 June 2019).
- Vitiello, M.V. (2006), 'Sleep in Normal Aging', *Sleep Medicine Clinics*, 1(2), pp.171–76. doi:10.1016/j.jsmc.2006.04.007 (accessed 31 May 2019).
- Walls, A.W.G. and J.G. Steele (2004) 'The Relationship Between Oral Health and Nutrition in Older People', *Mechanisms of Ageing and Development*, 125, pp.853–57. doi:10.1016/j.mad.2004.07.011 (accessed 12 July 2019).
- World Health Organization (n.d.), 'Body Mass Index – BMI'. <http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bmi> (accessed 12 July 2019).
- World Health Organization (WHO) (2017), *Depression and Other Common Mental Disorders: Global Health Estimates*. Geneva, Switzerland: WHO.

- WHO Kobe Centre for Health Development (2002), Global Review of Oral Health in Ageing Societies. *Ageing and Health Technical Report Volume 3*. https://apps.who.int/iris/bitstream/handle/10665/67584/WHO_WKC_Tech.Ser._02.2.pdf;jsessionid=3925C150930CFB5C842E4358D9FED1C5?sequence=1 (accessed 12 July 2019).
- Zhu, Y. and J. H. Hollis (2014), 'Tooth Loss and Its Association with Dietary Intake and Diet Quality in American Adults', *Journal of Dentistry*, 42, pp.1428–35. <http://dx.doi.org/10.1016/j.jdent.2014.08.012> (accessed 12 July 2019).
- 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: A Four-country Comparative Study*. Ann Arbor, MI: University of Michigan Press, pp.361–412.
- Zuluaga, D.J.M., J.A. Gil-Montoya, C.I. Contreras, and R.R. Herrera (2011), 'Association Between Oral Health, Cognitive Impairment, and Oral Health-related Quality of Life', *Gerodontology*, 29(2), pp.e667–e673. doi:10.1111/j.1741-2358.2011.00542.x (accessed 10 July 2019).

Functional Health

Grace T. Cruz and Yasuhiko Saito

How should we define health in older ages?

Ongoing discussions as to whether health should be defined as a 'state or an ability' reflect the shifting of the definition of health from a static concept towards a more dynamic and functional description or framework (Huber, 2010). The Constitution of the World Health Organization (WHO) (1946) defines health as 'a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity'. But the demographic and epidemiological transitions ushering age–sex structural changes have given way to global ageing and redefined the disease patterns from communicable to chronic diseases, thereby casting doubt on the effectiveness of such a definition. Questions have been raised particularly on the absoluteness of the word 'complete', which some argue 'would leave most of us unhealthy most of the time' (Smith, 2008). For example, an assessment by Von Faber et al. (2001), applying the WHO definition of health, found only tiny percentages of people who aged successfully. The increasing number of people living with chronic diseases worldwide, many of whom are able to continue functioning and to sustain a feeling of well-being, has led to the reconsideration of the definition of health. Rather than declare people with chronic diseases and disabilities as definitively ill, a preferred definition is one that captures 'the ability to adapt and to self-manage' (Huber et al., 2011: 2).

Within the context of the health of older persons (OPs), studies have demonstrated that daily functioning is a much more valuable predictor of survival than the presence of diseases or even comorbidities (Lordos et al., 2008). The emerging functional health framework shifts the perspective from a 'medical' model to a broader 'biopsychosocial' model of disability that integrates environmental factors (Berger, Robine, Ojima, Madans, and Van Oyen, 2016) affecting the OP's ability to cope and

adapt. The International Classification of Functioning, Disability, and Health (ICF) model, a multidimensional conceptual basis for the definition, measurement, and policy formulations for health and disability, is based on this integration of medical and social models of disability (WHO, 2002). In 2015, WHO shifted its focus from a disease-centred to a person-centred approach, ensuring that ‘all people have access to health services that respond to their preferences, are coordinated around their needs, and are safe, effective, timely, efficient, and of an acceptable quality’ (WHO, 2015: 34). An environment with barriers, or without facilitators, will restrict the individual’s performance; other environments that are more facilitating may increase that performance (Playford, 2015).

The concept of disability is complex and so are the instruments used to measure it. Disability is the difficulty of performing tasks and/or roles on one’s own due to health problems, which can be physical, sensory, emotional, or cognitive (Verbrugge, 2016). Traditional survey instruments measure disability using a limited number of tasks in the domain of personal care (activities of daily living [ADL]) or in the domain of household management (instrumental ADL [IADL]) (Van Oyen, Bogaert, Yokota, and Berger, 2018). The severity of the disability is measured by asking the degree of difficulty in doing ADL and IADL tasks. However, these ‘social activity limitation’ measures are inadequate in that they capture only a partial picture of the total activities that OPs normally perform. Broadening the coverage of the instrument to include more activity domains is likely to have cost implications, not to mention an increased respondent burden. Whilst ADL and IADL have been commonly used in disability research, their analysis is hampered by the lack of harmonisation across settings.

These measurement issues, including the reluctance amongst disability researchers to introduce lengthy survey instruments, have led to the crafting of a short set of disability questions that have good coverage of activities. Global health measures, sometimes called general measures, provide a snapshot of the health situation using one or a few survey questions (Robine, 2003). A good example of a short set is the six questions developed and tested by the Washington Group (WG) on Disability Statistics (2016), a United Nations city workgroup established under the United Nations Statistical Commission to develop disability measures to suit specific purposes (Madans et al., 2004). The WG Short Set of Questions on Disability asks about health-related difficulties in seeing, hearing, walking and/or climbing steps, remembering and/or concentrating, self-care, and communicating. The WG

measure asks if the respondent has no difficulty, some difficulty, or a lot of difficulty in doing the said activities or is unable to do them. The measure is being widely adopted in census and survey settings throughout the world (Verbrugge, 2016). In the Philippines, data on the WG Short Set of Questions on Disability were first collected in the 2010 census for the entire population (Philippine Statistics Authority, 2010).

In recent years, in response to a call to develop a more parsimonious measure of disability, the concept of the Global Activity Limitation Indicator (GALI) was proposed. This measure underlies healthy life years or disability-free life expectancy in most European Union member countries (Bogaert, Van Oyen, Beluche, Cambois, and Robine, 2018). GALI is intended to be a global self-reported measure of participation restriction because of its implicit reference to the ability to participate societally in a variety of non-specified settings and non-specified domains of life (e.g. employment, school, housework, and leisure) (Van Oyen et al., 2018). The GALI question is, 'For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do? Would you say you have been: severely limited, limited but not severely, or not limited at all?' Although GALI is widely used in Europe, it has never been validated in an Asian setting except in Taiwan (Hsiao, Wu, Hsu, Saito, and Lin, 2019). WG and GALI measures of disability are guided by the ICF model.

Bed disability is a common disability measure that captures extreme disability. This is broadly defined to include short-term episodes of restrictions on a person's usual activities and includes days spent in non-institutional illness involving confinement to bed for more than half the daylight hours (Sullivan, 1971).

A dimension of health in the disablement process that is closely related to the concept of disability is functional loss. Verbrugge and Jette (1994) described functional limitations as restrictions in performing fundamental physical and mental actions in daily life by one's age-sex group. These actions indicate the overall abilities of the body and mind to do purposeful 'work', including walking, lifting objects, climbing stairs, reading standard-size print, and hearing other people.

Amongst the measures of functional loss or limitations are the Nagi measures of physical functioning (Nagi, 1965), which include 10 questions that measure physical ability and agility. These questions are modified versions of the original set

of questions. Respondents were asked to indicate which of the following actions they find difficult to perform alone, without the assistance of a person or physical prop or aid: (1) walk 200–300 metres, (2) climb 10 steps without resting, (3) stand or go without sitting for 2 hours, (4) continue to sit for 2 hours, (5) stoop or bend knees, (6) raise hands above head, (7) extend arms out in front as if to shake hands, (8) grasp with fingers or move fingers, (9) lift an object weighing approximately 10 kg, and (10) lift an object weighing approximately 5 kg. Those who said they had no difficulty lifting a 10 kg object (item number 9) were not asked about item number 10.

All five measures of disability (ADL, IADL, WG Short Set of Questions on Disability, GALI, and bed disability) and one measure of functional loss (Nagi) were collected in the Longitudinal Study of Aging and Health in the Philippines (LSAHP). The following section will analyse these health indicators by age and sex. We first describe the level of disability in the context of ‘personal care’ using ADL disabilities and in ‘household management’ using IADL disabilities. Global measures of disability using the WG Short Set of Questions on Disability and GALI are discussed as comparable measures of disability. This is followed by a discussion on the OPs’ experience of bed confinement within 2 weeks prior to the survey. The final section is a discussion of functional limitations using the Nagi functioning measures.

Prevalence of Disability

Amongst the disability measures used in the study are ADL, which cover personal care tasks of everyday life. We asked the respondents if they have difficulty in performing the following activities alone, without the assistance of a person or assistive device, due to their health or physical state: (1) bathe and/or shower, (2) dress, (3) eat, (4) stand up from a bed or chair or sit down on a chair, (5) walk around the house, (6) go outside (leave the house), and (7) use the toilet.

Results show that a fifth (22%) of OPs have difficulty performing at least one of the seven activities. ADL disability is more pronounced amongst females than males (23% vs. 19%) (Figure 5.1) and is particularly significant in two activities (walking and toileting). The proportion who experience ADL difficulty monotonically increases with age, from 15% amongst those in their 60s to 24% amongst those in their 70s and to 51% amongst those in their 80s (Figure 5.2). Those who have ADL disability recorded an average of three ADL difficulties, with no apparent gender difference.

However, there is a clear age gradient, with the number of ADL difficulties increasing from 2.1 amongst those in their 60s to 2.7 amongst those in their 70s and surging to 3.4 amongst those in their 80s (Table 5.1). Overall, OPs find it most difficult to leave the house, particularly females and those in older age groups. Almost half (46%) of those in their 80s find it difficult to go out of the house alone. Males, in general, find it most difficult to stand up from a bed or chair or sit down on a chair.

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

Percent who Experience Difficulty with the ff. Activities:	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Take a bath/shower by oneself	5.0	6.3	n.s.	3.1	5.8	20.7	***	5.8
Dress	6.5	5.5	n.s.	4.1	5.0	18.3	***	5.9
Eat	2.5	3.0	n.s.	1.3	2.9	10.9	***	2.8
Stand up from a bed/chair; sit down on a chair	12.9	12.3	n.s.	9.7	12.3	28.9	***	12.6
Walk around the house	7.0	11.4	**	4.0	14.4	30.4	***	9.7
Go outside (leave the house)	11.2	17.5	n.s.	7.8	19.2	45.5	***	15.0
Using the toilet	4.5	6.5	*	2.7	5.9	22.2	***	5.7
% who experienced at least one ADL difficulty	19.5	23.2	n.s.	15.4	24.0	51.4	***	21.7
N	2,411	3,574		3,760	1,552	673		5,985
Mean number of ADLs with difficulty	2.55	2.71	n.s.	2.13	2.72	3.44	***	2.65
N	470	828		579	373	346		1,298

* $p < .05$. ** $p < .01$. *** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAPH data.

IADL are measures of household management, independent living, or the ability to be involved in one's community (Verbrugge, 2016). Seven IADL were used to capture the level of disability. We asked the respondents if they find it difficult to perform the following IADL due to their health or physical state: (1) prepare own meals; (2) leave the home to purchase necessary items or medications; (3) take care of financial matters such as paying utilities (e.g. electricity and water); (4) use the telephone; (5) dust, clean up, and do other light housework; (6) take the bus, jeepney, or public transport to leave home; and (7) take medications as prescribed.

Overall, about one in four admitted difficulty in performing at least one IADL, with the level significantly higher amongst females and increasing with age (Figure 5.1 and Figure 5.2). Similar to the pattern of ADL disability, results show an abrupt increase in the prevalence of IADL disability for those who survive to their 80s (i.e. from 19%

amongst those aged 60–69 to 57% amongst those aged 80+). Compared with ADL disability, the gender difference in IADL disability is more pronounced, with the level amongst females almost twice that of males (33% vs. 19%) (Table 5.2). Those who reported IADL disability recorded an average of 2.3 IADL difficulties, more amongst males than females. Those in their 60s with IADL difficulty reported an average of 1.9 activity limitations; the average increases to 2.4 for those in their 70s and abruptly increases to 3.0 for those 80 years and over.

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

Percent who Experience Difficulty with the ff. Activities:	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Prepare own meals	5.3	8.5	**	4.1	8.6	21.2	***	7.2
Leave home to purchase necessary items/medication	9.5	15.6	*	6.9	18.9	35.0	***	13.2
Take care of financial matters such as paying utilities	5.8	6.7	**	3.6	8.0	18.0	***	6.4
Use the telephone	2.9	5.3	n.s.	4.3	3.0	7.6	***	4.3
Dust, clean up, other light housework	8.0	9.5	n.s.	4.3	13.0	25.4	***	8.9
Take bus/jeep/public transport to leave home	13.3	24.2	***	11.0	28.7	48.6	***	19.8
Take medication as prescribed	2.8	4.4	n.s.	1.6	4.2	15.0	***	3.8
<i>N</i>	2,411	3,574		3,572	1,774	639		5,985
% who experienced at least one IADL difficulty	18.8	33.2	***	18.9	35.0	57.4	***	27.4
<i>N</i>	2,411	3,574		3,760	1,552	674		5,985
Mean number of IADLs with difficulty	2.53	2.24	n.s.	1.90	2.41	2.97	***	2.32
<i>N</i>	453	1,186		710	543	387		1,639

*p < .05. **p < .01. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Amongst the seven items, the use of transportation to leave home is by far the most difficult, regardless of age and sex. Overall, 20% expressed difficulty in using transportation, with females more likely than males to express difficulty (24% vs. 13%). The level of difficulty significantly increases from 11% amongst those in their 60s to almost half (49%) amongst those in their 80s. The second most difficult amongst the seven IADL is leaving home to purchase necessary items, which may relate to the prior difficulty. This is consistently registered as the second most prevalent difficulty for both sexes. Light household cleaning is the next top challenging activity, followed by preparation of their own meals. Using the telephone and taking medication as prescribed are amongst the least difficult to do for OPs, implying positive cognition.

Another disability measure employed in the study is the WG Short Set of Questions on Disability. Unlike ADL and IADL, which focus on the basic functioning of individuals within particular contexts, the WG Short Set of Questions on Disability is more generic and brief; it aims only to identify people at greater risk than the general population for participation restrictions due to the presence of difficulties in six core functional domains (Madans et al., 2004; Washington Group on Disability Statistics, 2016) (Table 5.3).

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

Difficulty	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Seeing, even if wearing glasses								
No difficulty	67.2	63.8		70.4	61.8	43.5		65.1
Some difficulty	26.5	27.3	n.s.	23.3	30.1	40.3	***	27.0
A lot of difficulty	4.4	6.0		3.9	6.1	12.2		5.4
Cannot do it at all	1.9	3.0		2.5	2.1	4.0		2.5
Hearing, even if using a hearing aid								
No difficulty	81.5	78.3		86.2	74.9	52.9		79.5
Some difficulty	11.1	12.9	n.s.	7.2	17.3	27.8	***	12.2
A lot of difficulty	2.8	3.7		1.2	3.4	15.3		3.3
Cannot do it at all	4.6	5.2		5.4	4.4	4.0		5.0
Walking or climbing steps								
No difficulty	68.9	56.1		71.5	50.5	29.2		61.3
Some difficulty	22.2	31.1	***	22.9	35.0	36.0	***	27.5
A lot of difficulty	6.9	10.0		4.9	12.2	22.1		8.7
Cannot do it at all	2.1	2.7		0.7	2.3	12.8		2.5
Remembering or concentrating								
No difficulty	63.0	55.8		67.5	49.7	30.4		58.7
Some difficulty	32.3	37.0	*	30.1	43.5	43.8	***	35.1
A lot of difficulty	4.1	6.5		2.2	6.0	22.8		5.5
Cannot do it at all	0.7	0.8		0.3	0.8	3.1		0.7
Self-care (washing all over or dressing)								
No difficulty	91.0	90.3		93.7	91.2	71.8		90.6
Some difficulty	6.2	5.4	n.s.	5.2	5.3	9.3	***	5.7
A lot of difficulty	1.1	1.9		0.5	1.5	7.4		1.6
Cannot do it at all	1.8	2.5		0.6	2.0	11.6		2.2
Communicating								
No difficulty	93.5	91.7		96.1	91.9	73.4		92.4
Some difficulty	5.0	6.2	n.s.	3.3	5.9	18.7	***	5.7
A lot of difficulty	1.0	1.3		0.3	1.0	6.5		1.2
Cannot do it at all	0.5	0.8		0.3	1.2	1.4		0.7
% with at least one difficulty	62.5	71.2	**	59.0	77.5	93.6	***	67.7
% with at least one with 'some difficulty'	57.1	65.0	**	54.0	71.3	83.6	***	61.9

Difficulty	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% with at least one with 'a lot of difficulty'	15.1	19.5	**	11.1	21.8	45.8	***	17.7
% with at least one with 'cannot do it at all'	7.7	8.9	n.s.	6.4	7.7	21.6	***	8.4
N	2,411	3,574		3,760	1,552	673		5,985

*p < .05. **p < .01. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Findings indicate that about 7 in 10 OPs have one difficulty amongst the six items; 62% have some difficulty, 18% have a lot of difficulty, and 8% cannot perform at least one activity. Older people generally find communicating the least difficult to perform, followed by self-care, hearing, and seeing. They recorded the highest difficulty in remembering or concentrating, with males experiencing more difficulty than females. The degree of difficulty dramatically increases with age, as shown in the proportion who reported cognitive difficulty: from a third amongst those in their 60s to as high as 70% amongst those in their 80s. OPs reported walking or climbing as the next most difficult to perform.

GALI is a single-question instrument that provides a global measure of disability. It measures long-standing activity limitations in a broad range of activities in the 6 months or more prior to the survey. Prevalence by age and sex is presented in Table 5.4. Findings show agreement in the age pattern of the GALI with the three other disability measures (ADL, IADL, and the WG Short Set of Questions on Disability) but not in the gender differences. Unlike the three other measures, which show consistently higher disability amongst females, there is no significant gender difference reported in GALI disability. The age gradient shows an increasing level of disability with advancing age. The proportion without any GALI disability decreases with advancing age, from 47% amongst those in their 60s to 35% for those in their 70s and to 20% for those in the oldest age group (80+). Similarly, the proportion reporting severe limitation increases dramatically with age: 10%, 12%, and 36%, respectively.

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	13.7	13.2	n.s.	9.7	12.3	36.4	***	13.4
Yes, limited but not severely	46.5	45.0		42.9	52.9	43.7		45.6
Not limited at all	39.9	41.8		47.4	34.8	19.9		41.0
<i>N</i>	2,411	3,574		3,760	1,551	673		5,985

*** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Empirical data on OPs' experience of being bedridden within 2 weeks prior to the survey was collected as an indicator of extreme disability. We asked the respondents, 'Have you ever been bedridden for any reason during the past 2 weeks?' Of those who responded 'yes', we asked, 'How many days were you in bed?' Results show that 2.4% had been bedridden within a couple of weeks before the survey, with no gender difference. The preponderance of the condition increases significantly with age, from 2% amongst those in their 60s to 8% amongst those in the oldest age group (Table 5.5). Those who had been bedridden reported an average of 7 days in bed or about 50% of the time. There is no gender difference, but the number of days they were confined in bed increases monotonically with age from 5 days amongst those in their 60s to 9 days amongst those in their 80s.

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	2.2	2.6	n.s.	1.5	2.7	7.5	***	2.5
<i>N</i>	2,412	3,574		3,760	1,551	673		5,985
Mean number of days in bed	7.85	6.64	n.s.	5.34	7.17	8.96	***	7.06
<i>N</i>	48	91		54	39	47		140

*** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Table 5.6 shows the level of functional loss using the Nagi measures of physical functioning. Amongst all 10 activities, OPs find the following tasks the most difficult to perform: standing without sitting for 2 hours, lifting 10 and 5 kg objects, climbing 10 steps without resting, and walking 200–300 metres. Generally, there is a clear gender and age disparity, with females and the older cohort reporting higher levels of difficulty than their younger counterparts (Figure 5.1 and Figure 5.2). Those who expressed difficulty in performing any of the Nagi tasks alone, without the assistance of a person or physical prop or aid, reported an average of four difficulties.

The average is higher amongst females than males (3.8 vs. 3.4) and increases with age: 3.2 for those in their 60s, 3.7 for those in their 70s, and 4.9 for those in their 80s. The measures vary in their time reference, with some capturing the current health state and others (e.g. GALI) referring to health status at least 6 months from the time of the interview.

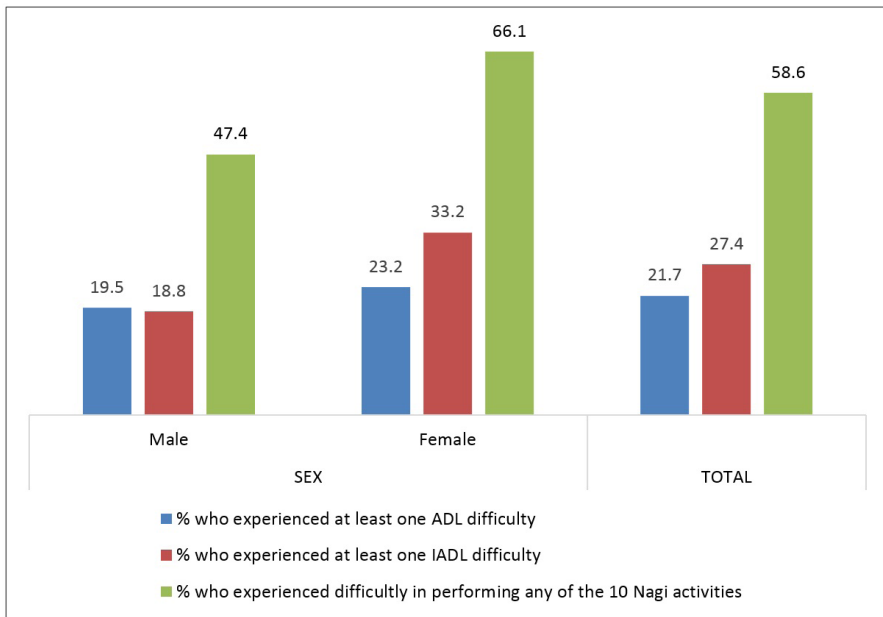
Table 5.6. Nagi Functioning Measures by Sex and Age

Percent who Experience Difficulty with the ff. Activities:	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Walk 200 to 300 meters	20.5	33.5	***	19.4	37.7	56.2	***	28.3
Climb 10 steps without resting	23.8	39.3	***	21.9	45.6	66.8	***	33.1
Stand (go without sitting) for 2 hours	32.0	42.8	**	29.4	48.0	66.9	***	38.4
Continue to sit for 2 hours	17.8	23.6	n.s.	19.1	21.3	33.0	**	21.2
Stoop or bend your knees	20.8	23.8	n.s.	16.8	27.3	44.1	***	22.6
Raise your hands above your head	8.5	5.9	n.s.	5.5	7.2	14.1	***	6.9
Extend arms out in front of you as if to shake hands	3.6	3.5	n.s.	1.8	4.8	10.4	***	3.5
Grasp your fingers or move your fingers easily	6.0	8.6	*	5.9	8.7	14.1	***	7.6
Lift an object weighing approximately 10 kg	20.0	50.1	***	26.9	48.8	75.0	***	38.0
N	2,411	3,574		3,760	1,552	674		5,985
Lift an object weighing approximately 5 kg	38.9	33.0	n.s.	20.7	40.0	55.3	***	34.3
N	517	1,900		1,123	781	514		2,418
% who experienced difficulty in performing any of the 10 activities	47.4	66.1	***	47.9	72.2	86.9	***	58.6
N	2,411	3,574		3,760	1,552	673		5,985
Mean number of Nagi activities with difficulty	3.40	3.76	*	3.19	3.73	4.86	***	3.64
N	1,142	2,360		1,799	1,118	585		3,502

*p < .05. **p < .01. ***p < .001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

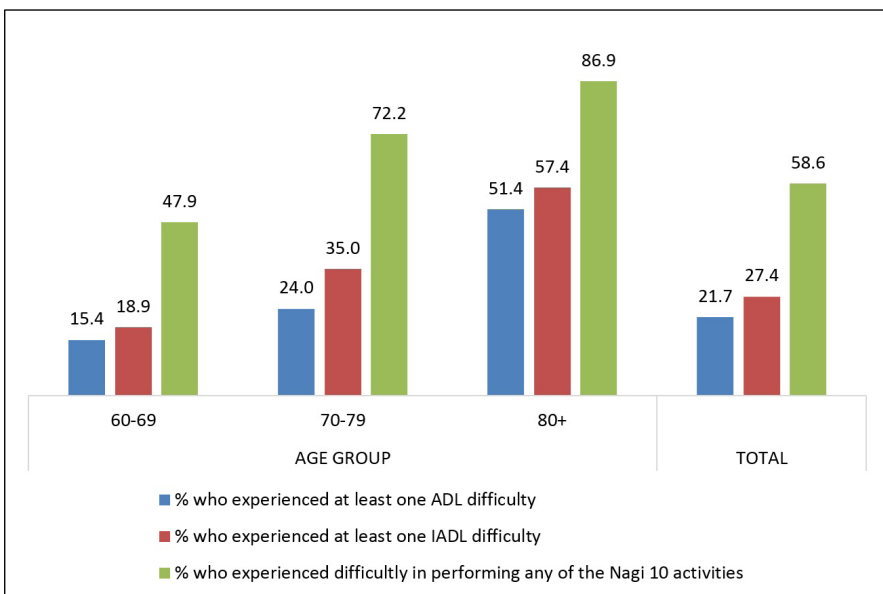
Figure 5.1. Functional Difficulty of Older Persons by Sex



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

Source: Calculated by DRDF using original LSAHP 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 DRDF using original LSAHP data.

Summary, Conclusions, and Recommendations

Redefining the health framework from a 'static concept towards a more dynamic and functional description' (Huber, 2010: 3) makes it relevant to assess OPs' functional health. The functional health perspective that considers not only individual capacities but also environmental influences on health provides a broader perspective that implies a wider-ranging policy intervention to address elder health. It is within this context that the LSAHP explored empirical measures of disability and the related concept of functional loss, which are key dimensions in functional health. Results present interesting data for framing appropriate health policies and programmes.

Following the disablement process, which is often used as a foundation for disability research, we employed five measures of disability that are not necessarily comparable. Some are limited to specific domains such as self-care, independent living, sensory ability, or cognition, whilst others are more comprehensive or global. The measures vary in their time reference, with some capturing the current health state and others (e.g. GALI) referring to health status at least 6 months from the time of the interview.

Despite the lack of harmonisation, results show generally good agreement across measures, with all five disability indicators revealing an increasing disability pattern with advancing age. The sex pattern is generally consistent, showing that females have a poorer disability status than males. An exception is the GALI disability measure, which shows no gender disparity.

One major finding that requires urgent policy response is the incidence of severe disability measured in terms of current bed confinement. Expectedly, we see increasing severity with advancing age, with 7% of those in their 80s having been confined to bed for 9 days on average in the 2 weeks before the survey. Using the projected number of OPs aged 80 years and over based on the 2015 census, this translates to over 55,000 octogenarians with bed disability, each of them more likely to be confined to bed within a 2-week period. Such findings have tremendous implications for potential demand for caregiving, long-term care, and rehabilitation, which needs to be addressed if we are to ensure the well-being of older Filipinos.

References

- Berger, N., J. Robine, T. Ojima, J. Madans, and H. van Oyen (2016), 'Harmonising Summary Measures of Population Health Using Global Survey Instruments', *Journal of Epidemiology and Community Health*, 70(10), pp.1039–44. doi:10.1136/jech-2015-206870 (accessed 17 July 2017).
- Bogaert, P., H. Van Oyen, I. Beluche, E. Cambois, and J-M. Robine (2018), 'The Use of the Global Activity Limitation Indicator (GALI) and Healthy Life Years (HLY) by Member States and the European Commission', *Archives of Public Health*, 76(30), pp.1–7. <https://doi.org/10.1186/s13690-018-0279-z> (accessed 11 September 2019).
- Hsiao, R., C. Wu, C. Hsu, Y. Saito, and Y. Lin (2019), 'Validation of the Global Activity Limitation Indicator in Taiwan', *BMC Medical Research Methodology*, 19(1). doi:10.1186/s12874-019-0693-0 (accessed 21 July 2019).
- Huber, M. et al. (2011), 'How Should We Define Health?', *BMJ*, 343, d4163. doi:10.1136/bmj.d4163 (accessed 7 June 2019).
- Huber, M. (2010), 'Is Health a State or an Ability? Towards a Dynamic Concept of Health'. Report of the Health Council of the Netherlands and Netherlands Organization for Health Research and Development Meeting, 10–11 December 2009, The Hague, Netherlands.
- Lordos, E.F., F.R. Herrmann, J-M. Robine, M. Balahoczkzy, 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. doi:10.1089/rej.2008.0721 (accessed 12 December 2014).
- Madans, J. et al. (2004), 'Washington Group Position Paper: Proposed Purpose of an Internationally Comparable General Disability Measure'. http://www.washingtongroup-disability.com/wp-content/uploads/2016/01/WG_purpose_paper.pdf (accessed 21 July 2019).
- Nagi, S.Z. (1965), 'Some Conceptual Issues in Disability and Rehabilitation', in M. B. Sussman (ed.), *Sociology and Rehabilitation*. Washington, DC: American Sociological Association, pp.100–13.
- Philippine Statistics Authority (2010), *Census of Population and Housing, Report No. 2A: Demographic and Housing Characteristics (Non-sample Variables)*. Philippines: Philippine Statistics Authority.
- Playford, D. (2015), 'The International Classification of Functioning, Disability, and Health', in V. Dietz and N. Ward (eds.), *Oxford Textbook of Neurorehabilitation*. Oxford, United Kingdom: Oxford University Press, pp.3–7. doi:10.1093/med/9780199673711.003.0001 (accessed 21 July 2019).
- Robine, J. (2003), 'Creating a Coherent Set of Indicators to Monitor Health Across Europe: The Euro-REVES 2 Project', *The European Journal of Public Health*, 13(Supplement 1), pp.6–14. doi:10.1093/eurpub/13.suppl_1.6 (accessed 21 July 2019).

- Smith, R. (2008), 'The End of Disease and the Beginning of Health'. <https://blogs.bmj.com/bmj/2008/07/08/richard-smith-the-end-of-disease-and-the-beginning-of-health> (accessed 12 July 2019).
- Sullivan, D. F. (1971), 'A Single Index of Mortality and Morbidity', *HSMHA Health Reports*, 86(4), p.347. doi:10.2307/4594169 (accessed 21 July 2019).
- Van Oyen, H., P. Bogaert, R.T.C. 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, p.25. <https://doi.org/10.1186/s13690-018-0270-8> (accessed 12 July 2019).
- Verbrugge, L.M. (2016), 'Disability Experience and Measurement', *Journal of Aging and Health*, 28(7), pp.1124–58. <https://doi.org/10.1177/0898264316656519> (accessed 12 July 2019).
- Verbrugge, L.M. and A.M. Jette (1994), 'The Disablement Process', *Social Science & Medicine*, 38(1), pp.1–14. doi:10.1016/0277-9536(94)90294-1 (accessed 21 May 2019).
- Von Faber, M. et al. (2001), 'Successful Aging in the Oldest Old: Who Can Be Characterized as Successfully Aged?' *Archives of Internal Medicine*, 161, pp.2694–700. doi:10.1001/archinte.161.22.2694 (accessed 20 July 2019).
- Washington Group on Disability Statistics (2016), Short Set of Disability Questions. <http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/> (accessed 21 May 2019).
- World Health Organization (1946), 'Constitution of the World Health Organization', *American Journal of Public Health and the Nation's Health*, 36(11), pp.1315–23. doi:10.2105/ajph.36.11.1315 (accessed 21 July 2019).
- World Health Organization (WHO) (2002), *Towards a Common Language for Functioning, Disability, and Health: The International Classification of Functioning, Disability, and Health (ICF)*. Geneva, Switzerland: WHO.
- World Health Organization (WHO) (2015), *World Report on Ageing and Health*. Geneva, Switzerland: WHO.

Healthcare and Healthcare Utilisation

Josefina N. Natividad

As people age, they are expected to be more likely to experience chronic health problems and declining functional capacity. Generally, older adults may be in greater need of healthcare services than younger cohorts. Health seeking is affected by many factors apart from the availability of health services. Healthcare may be provided not just through the formal system but also the informal kin-based support system. The Longitudinal Study of Aging and Health in the Philippines (LSAHP) obtained information about older Filipinos' health seeking from formal and informal sources of care in the recent past. The study also obtained information about long-term care (LTC), currently an important concern in ageing societies but not yet in the Philippines, where the population is not yet ageing.

Formal Care

Formal care refers to healthcare provided by the healthcare system. Two types of care are explored in the survey: inpatient and outpatient care.

Inpatient Care Utilisation

Inpatient care refers to healthcare that requires the ill person to stay in a health facility for an extended period. The LSAHP defines utilisation of inpatient health services as staying at least overnight in a health facility in the 12 months preceding the survey (Table 6.1). Results show that 15% of all older persons (OPs) availed themselves of inpatient care within that time frame, with the percentage increasing with age. Amongst the oldest age cohort (80+), one in five stayed overnight in a health facility.

Table 6.1. Inpatient Utilisation by Sex and Age

Inpatient Utilization	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	14.1	14.9	**	11.9	18.7	20.4	***	14.6
<i>N</i>	2,411	3,573		3,760	1,552	673		5,985
Mean number of times stayed at least overnight in a hospital	2.01	1.64	**	1.49	2.08	2.11	***	1.78
Type of facility used the last time hospitalized								
Municipal hospital	8.3	7.9		8.3	9.3	4.4		8.0
District hospital	7.7	3.6		3.6	8.0	3.7		5.0
Provincial/city hospital	23.6	24.5		22.8	26.0	25.0		24.2
Regional hospital	4.1	2.1		4.2	0.7	2.9		2.9
Public/national hospitals (e.g., PGH)	9.4	5.2	**	6.9	8.0	4.4	***	6.9
Public specialty hospitals	68.9	56.1		71.5	50.5	29.2		61.3
Private clinic	0.3	0.2		0.2	0.0	0.7		0.2
Private hospital	2.9	5.0		7.6	0.7	0.7		4.2
Others	43.7	51.4		46.4	47.1	58.1		48.5
<i>N</i>	339	535		448	289	136		874
Who paid the most for the hospitalization								
Respondent	20.4	17.8		19.4	19.3	15.3		18.7
Spouse	12.4	5.6		13.8	2.8	2.2		8.3
Children	44	52.1	**	42.0	56.6	54.7	***	48.8
Grandchildren	2.9	2.4		1.3	1.7	9.5		2.7
Other relatives	5.3	3.4		3.8	4.5	4.4		4.1
Friends	0.6	0.4		0.7	0.3	0.0		0.5
Others (e.g., pension)	14.5	18.4		19.0	14.8	13.9		16.8
% who availed of PhilHealth benefits			***				n.s.	
As a member	82.9	83.5		81.7	83.8	88.1		83.4
As a dependent	3.8	7.9		6.7	6.2	5.2		6.3
% who availed of other medical/ health insurance aside from PhilHealth	5.9	6.9	n.s.	7.8	3.8	8.1	n.s.	6.5
<i>N</i>	340	534		448	290	137		875
Kind of medical/health insurance								
Private health insurance system	20.5	31.4	n.s.	38.0	8.0	23.5	*	27.2
Others (e.g., senior card)	28.2	39.6	n.s.	32.0	36.0	41.2	n.s.	34.8
<i>N</i>	39	53		50	25	17		92
% who availed of discounts for senior citizens for medical expenses	79.6	88.2	**	83.3	84.4	90.5	n.s.	84.8
<i>N</i>	339	534		448	289	137		874

*p < 0.05. **p < 0.01. ***p < 0.001. n.s. = not significant.

PGH = Philippine General Hospital.

Source: Calculated by DRDF using original LSAHP data.

Amongst those who availed themselves of inpatient health services, the average number of confinements in the past year was 1.8, higher for men and increasing with age. As to the type of facility they stayed in during the last confinement, the percentages are almost evenly divided between public and private facilities, with private facilities having a slight edge (54%) over public facilities (46%). Asked who paid the most for their last hospitalisation, only 27% of the respondents reported that they themselves or their spouse paid the most, whilst 49% said their children did, reflecting the heavy reliance on children as an informal support pillar in the healthcare of older Filipinos.

There is one positive note in that about 90% of the hospitalised availed themselves of benefits from PhilHealth, the national health insurance system, either as members (83%) or as dependents of members. This is a highly significant improvement in healthcare financing for older Filipinos; of the 2007 cohort, only 46% reported availing themselves of PhilHealth benefits either as members or dependents (Cruz, Natividad, Gonzales, and Saito, 2016). This development is directly attributable to the enactment in 2014 of Republic Act (RA) 10645, which provides for mandatory PhilHealth coverage of senior citizens, amending the Expanded Senior Citizens' Act of 2010. Of the respondents, 85% avail themselves of senior citizen discounts for medical expenses, which are part of law-mandated senior citizen privileges.

Outpatient Care Utilisation

In general, more OPs went for outpatient than inpatient care (Table 6.2). About 4 in 10 reported receiving medical care for an illness or accident in the past 12 months without staying overnight in a medical facility; the percentage is slightly higher amongst women (44%) than men (39%). There is no age-related pattern in the outpatient utilisation rate.

As to the type of facility visited most as an outpatient, the percentage is about evenly divided between public and private facilities, with public facilities having a slight edge (52%) over private facilities (48%), the reverse of the utilisation pattern for inpatient care. In 9 out of 10 cases, those who availed themselves of outpatient care saw a physician for most of their health problems.

Table 6.2. Outpatient Utilisation by Sex and Age

Outpatient Utilization	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	38.8	43.5	***	41.9	40.4	42.8	n.s.	41.6
<i>N</i>	2,411	3,574		3,761	1,551	673		5,985
Type of facility visited most as an out-patient								
Barangay health station	8.4	17.1		13.5	14.0	15.2		13.8
Rural health unit	9.6	6.0		8.7	5.1	4.8		7.3
Municipal/community hospital	6.2	6.6		4.8	9.3	9.7		6.5
District hospital	2.2	5.7		5.1	1.9	5.9		4.4
Provincial/City hospital	17.0	12.4	***	13.3	17.4	11.8	***	14.1
Regional hospital	4.5	0.7		2.7	0.3	3.1		2.1
Public/National hospitals	3.1	2.4		2.5	2.6	3.8		2.7
Public specialty hospitals	0.1	0.8		0.8	0.0	0.7		0.6
Private clinic	24.0	23.6		23.5	26.3	19.7		23.8
Private hospital	24.5	23.4		24.3	22.5	24.6		23.9
Others (medical missions, etc.)	0.3	1.2		1.0	0.6	0.7		0.8
<i>N</i>	937	1,553		1,576	627	289		2,492
Health practitioner seen most often for health problems								
Traditional practitioner	0.3	0.1		0.1	0.3	0.0		0.2
Doctor	91.8	90.6		91.3	91.1	89.9		91.1
Nurse	3.1	3.6	n.s.	3.4	3.1	3.8	n.s.	3.4
Midwife	2.8	3.9		3.6	2.7	4.9		3.5
Barangay health worker (BHW)	2.0	1.7		1.6	2.7	1.0		1.8
Others	0.0	0.1		0.0	0.0	0.3		0.0
<i>N</i>	936	1,550		1,575	621	288		2,484

***p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Unmet Need for Health Care

The relatively low percentage of OPs who sought outpatient care in the year before the survey is not necessarily a reflection of the low level of need for medical consultation. About 3 in 10 of all OPs reported that they felt ill in the past 12 months and thought of going to the doctor but did not (Table 6.3). Whilst many reasons are given for not seeking help, the most common is the lack of financial means. This is indicative of a high level of unmet need for medical attention due to financial constraints. In all, one in five OPs have an unmet need for medical care because of financial reasons.

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	27.3	30.3	*	29.7	29.5	24.5	***	29.0
N	2,411	3,573		3,760	1,552	673		5,985
% whose most important reason for not seeing a doctor is not having enough money	21.8	20.4	n.s.	21.2	22.4	16.6	**	21.0
N	2,412	3,573		3,760	1,552	673		5,985

*p < 0.05, **p < 0.01, ***p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Health Insurance Coverage

In all, 80% of older Filipinos have health insurance coverage, nearly all of them (98%) under PhilHealth. Only 2% of the insured are covered by non-PhilHealth insurance (Table 6.4). There is no marked difference in health insurance coverage by sex but the percentage with insurance increases with age. The oldest old have the highest percentage with health insurance (86%).

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	81.0	79.9	n.s.	79.1	81.1	85.6	***	80.3
N	2,411	3,574		3,760	1,552	673		5,985
Type of health insurance								
PhilHealth	99.1	97.7	***	98.0	98.5	99.0	n.s.	98.3
Private health insurance	1.4	1.7	n.s.	2.4	0.3	0.2	***	1.6
Others (e.g., employees' compensation)	1.3	2.9	***	2.5	2.0	1.7	n.s.	2.3
N	1,953	2,856		2,975	1,259	575		4,809

***p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Public Health Services for Older Persons

The public health system used to be largely devoted to delivering preventive and curative healthcare to the young (infants and children) and to mothers. Recent changes signal an awareness of the need to provide public health services targeted to the older segment of the population. Amongst these services are (1) free immunisation against pneumonia (with the pneumococcal vaccine) and influenza (with the flu vaccine) for older adults (Department of Health [DOH] Administrative Order No. 2011-0018); and (2) free medicines for two highly prevalent chronic conditions in the older population: hypertension and diabetes (DOH Administrative Order No. 2016-0014). The LSAHP included questions to gauge the awareness and use of these services by older adults.

Vaccination

The results show that only 4 in 10 older Filipinos – more women than men – are aware of the pneumococcal vaccine (Table 6.5). Of those who are aware, about half (53%) had a pneumococcal vaccination after turning 60. The percentage of the aware declines steadily with age, but amongst the aware the percentage vaccinated increases with age. Significantly more women received the pneumococcal vaccine after turning 60. Almost all (90%) received this vaccination from a public facility, notably the barangay health station.

Awareness of the flu vaccine for OPs is comparatively low at 30%. Of those who are aware of the flu vaccine, only a little over a third (36%) were vaccinated after they turned 60. The same age–sex pattern is noted for the pneumococcal vaccination but at much lower prevalence levels. The flu vaccination was received most commonly at the barangay health station.

Table 6.5. Vaccinations by Sex and Age

Vaccinations	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who are aware of pneumococcal vaccine for older persons	32.2	47.0	***	43.4	40.2	29.7	***	41.0
<i>N</i>	2,412	3,574		3,760	1,552	674		5,985
% who have had a pneumococcal vaccination since they turned 60 years old	39.2	59.3	***	50.3	56.6	63.0	***	52.9
<i>N</i>	776	1,678		1,632	624	200		2,456

Vaccinations	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Place where last pneumococcal vaccine was received								
Barangay health station	75.2	78.3		78.7	77.6	69.8		77.5
Rural health unit	5.3	5.1		5.7	4.5	4.0		5.2
Municipal/ community hospital	5.3	2.3		2.1	5.1	3.2		3.0
District hospital	0.3	0.0	**	0.0	0.3	0.0	***	0.1
Provincial/city hospital	2.3	4.6		4.3	3.1	6.3		4.2
Public/ national hospitals	0.7	0.3		0.4	0.0	1.6		0.4
Private clinic	4.6	1.7		1.5	3.4	5.6		2.4
Private hospital	1.0	1.4		0.5	1.1	7.1		1.3
Others (e.g., medical mission, covered court)	5.3	6.2		6.9	4.8	2.4		5.9
<i>N</i>	303	995		821	353	126		1,300
% who are aware of flu vaccine for older persons								
	23.5	33.7	***	30.2	32.3	19.8	***	29.6
<i>N</i>	2,411	3,574		3,760	1,552	673		5,985
% who have had a flu vaccination since they turned 60 years old								
	25.9	41.2	***	33.8	37.9	51.1	***	36.3
<i>N</i>	568	1,203		1,137	501	133		1,771
Place where last flu vaccine was received								
Barangay health station	81.5	75.7		77.4	74.9	78.3		76.7
Rural health unit	3.4	5.2		6.2	3.1	2.9		5.0
Municipal/ community hospital	1.4	4.6		5.2	2.1	0.0		3.7
District hospital	0.0	0.2	n.s.	0.0	0.5	0.0	***	0.2
Provincial/city hospital	0.7	4.8		6.2	0.5	1.4		4.0
Private clinic	8.9	4.6		2.6	9.9	10.1		5.6
Private hospital	0.7	0.8		0.5	1.0	2.9		0.9
Others	3.4	4.0		1.8	7.9	4.3		3.9
<i>N</i>	146	497		385	191	69		645

p < 0.01, *p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Free Medicines for Hypertension and Diabetes

A most welcome public health service offered by the DOH is the provision of free medications for hypertension and diabetes at local health centres (DOH Administrative Order No. 2016-0014). The LSAHP provides data for the DOH that show how this service is reaching intended beneficiaries such as older adults with these chronic conditions.

Those who reported being diagnosed with hypertension and/or diabetes were asked if they take medications for the condition. Those who take medications were asked whether they get their medicines from a public health facility all the time.

Table 6.6 shows that, amongst those diagnosed with hypertension, 7 in 10 are taking medications. Amongst the diagnosed hypertensives, 3 in 10 received their medications from the health centre. Amongst the diagnosed diabetics, 68% are taking medications. Unlike hypertensives, only 18% of diabetics receive their medicines from the health centre all the time.

OPs were asked whether, at the time of the survey, they were taking any supplements such as multivitamins, antioxidants, and food supplements: 38% reported taking a supplement, women (44%) more than men (34%). There is no age-related difference.

Table 6.6. 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	68.3	75.9	***	72.0	74.7	76.9	n.s.	73.3
N	925	1,797		1,633	768	321		2,722
Diabetes	67.0	68.0	n.s.	66.0	71.0	67.7	n.s.	67.5
N	288	466		476	217	62		754
% who get medicine from health center(s) all the time								
High blood pressure	32.8	29.9	n.s.	32.6	27.7	29.9	***	30.9
N	924	1,798		1,632	769	321		2,722
Diabetes	19.1	18.0	n.s.	18.1	21.7	9.7	***	18.4
N	288	467		475	217	62		755
% taking any supplement	34.2	43.6	***	38.6	42.7	39.8	*	39.8
N	2,411	3,574		3,760	1,552	673		5,985

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

Source: Calculated by DRDF using original LSAHP data.

Informal Care

Informal healthcare refers to care received from kin and other people when one is ill. Respondents were asked who usually takes care of them when they fall ill. The reference period is from the time they turned 60 to the time of the survey to limit the reference period to the older years.

The most commonly cited person who takes care of the respondent when they fall sick is the spouse (about a third of all respondents) (Table 6.7). But there is a strong gender difference. There is such a clear disparity between men and women in the

person they name as caregiver when they are sick that the overall percentage captures the picture neither for men nor for women. About 6 in 10 men reported that their major caregiver is their spouse; the corresponding percentage for women is only 18%. Women most commonly reported a daughter as their major caregiver (38%); the corresponding percentage of men who are taken care of by a daughter is 14%.

Table 6.7. Person Who Usually Takes Care of Older Person When He/She is Sick Since Age 60 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	
None/self	13.8	19.7		18.7	17.0	10.4		17.3
Spouse	59.3	17.5		42.2	25.1	12.0		34.3
Son	7.6	13.4		10.3	11.8	14.1		11.1
Daughter	13.8	37.6	***	22.9	33.8	43.5	***	28.0
Daughter-in-law	0.7	2.9		1.1	3.1	4.6		2.0
Grandchild	1.3	4.6		2.3	3.9	7.0		3.3
Other relatives	1.9	2.0		1.6	2.6	2.5		2.0
Others	1.5	2.2		0.9	2.6	5.8		1.9
<i>N</i>	2,412	3,573		3,762	1,552	673		5,985

*** $p < 0.001$.

Source: Calculated by DRDF using original LSAHP data.

As age increases, the percentage taken care of by a spouse progressively decreases whilst the percentage taken care of by a daughter increases. Although not shown in the data, the age-related decrease in the percentage taken care of by a spouse and corresponding increase in daughters as caregivers are likely related to age-related changes in marital composition (increasing widowhood in the older years) and differential mortality patterns of men and women (i.e. women live longer, resulting in a higher percentage of women in the older years). The overall picture shows that caregiving for older Filipinos is mostly a female role.

Long-term Care

The LSAHP is the first ageing survey in the Philippines to explore the issue of LTC. As broadly defined by the World Health Organization (2017: 2), LTC ‘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’. Operationally, LTC

is nonmedical care provided to persons who need continuing assistance in performing the basic activities of daily living.

Long-term Care: Current Practice

Of the 5,985 OPs in the LSAHP sample, 461 or 8% are receiving care because of a continuing health condition and are thus classifiable as receiving LTC. They are about evenly distributed between men and women and are mostly in the oldest old age group (161 of the 461 are aged 80 and over). Practically all (over 9 in 10) require daily care (Table 6.8).

Table 6.8. Long-term Care by Sex and Age

Vaccinations	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	8.8	7.6	n.s.	5.3	6.9	26.4	***	8.1
<i>N</i>	2,411	3,574		3,760	1,552	673		5,985
Person mainly taking care of older person								
Spouse	65.3	7.7		46.0	44.9	11.2		32.9
Son	2.3	18.5		9.0	15.0	12.3		11.5
Daughter	22.1	48.7		32.5	27.1	47.5		36.8
Daughter-in-law	4.7	8.1	***	4.5	5.6	10.1	***	6.8
Grandson	0.5	2.2		0.5	1.9	2.2		1.4
Granddaughter	0.9	7.0		2.5	1.9	7.8		4.3
Househelp	0.5	1.5		0.5	0.9	1.1		0.8
Sibling	2.3	1.1		2.5	0.0	1.7		1.6
Others (e.g., friends, caregiver)	1.4	5.2		2.0	2.8	6.1		3.7
<i>N</i>	213	271		200	107	179		486
Frequency of care given								
Every day	94.8	90.4		93.5	89.8	92.1		92.2
Every few days	3.3	6.3	n.s.	2.5	6.5	6.7	n.s.	4.9
Every week	0.5	0.4		0.5	0.9	0.0		0.4
Every month	0.5	0.7		1.0	1.9	0.0		0.8
Every few months	0.9	2.2		2.5	0.9	1.1		1.6
<i>N</i>	212	271		199	108	178		485
Kind of care provided								
Preparation of food	96.7	88.2	***	90.5	93.5	92.7	n.s.	92.0
Give medicine	47.4	55.7	n.s.	36.7	63.0	62.4	***	52.0
Self-care (e.g., bathing, washing)	31.5	59.4	***	33.2	56.5	56.7	***	47.0
Getting up from bed/chair	20.7	39.9	***	20.1	35.5	41.6	***	31.4
Assist in moving around	29.1	47.6	***	21.5	45.4	56.2	***	39.5
Others	8.0	9.6	n.s.	9.5	10.3	7.3	n.s.	8.9
<i>N</i>	213	272		199	108	178		485

Vaccinations	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Person older persons would like to receive care from in case older person will have dementia								
Spouse	46.8	9.9		29.9	16.9	8.0		24.8
Son	11.5	15.3		14.1	12.5	15.5		13.8
Daughter	28.7	58.1		43.5	51.7	51.4		46.3
Daughter-in-law	0.2	2.0	***	0.9	1.5	3.4	***	1.3
Grandson	0.5	0.6		0.3	1.1	1.1		0.5
Granddaughter	2.7	3.9		2.4	4.4	9.1		3.4
Personal aide	0.2	0.1		0.2	0.1	0.0		0.2
Hospital	0.0	0.0		0.0	0.0	0.2		0.0
Others (e.g., siblings, nieces)	5.5	5.0		5.2	4.9	5.9		5.2
Not sure	4.0	4.9		3.5	6.9	5.5		4.5
<i>N</i>	2,195	3,259		3,617	1,399	440		5,456
Person who will most likely take care of older person in case older persons will have dementia								
Spouse	43.9	9.5		27.8	16.9	8.0		23.4
Son	11.8	17.4		16.0	12.6	16.4		15.2
Daughter	29.9	54.4		42.5	47.1	53.1		44.6
Daughter-in-law	1.1	2.2	***	1.5	1.9	3.2	***	1.8
Grandson	0.3	0.9		0.2	1.7	1.1		0.6
Granddaughter	2.2	3.6		1.8	5.0	6.8		3.0
Personal aide	0.2	0.2		0.2	0.2	0.2		0.2
Hospital	0.1	0.0		0.1	0.0	0.2		0.1
Others (e.g., siblings, nieces)	3.0	3.7		2.9	4.1	5.5		3.4
Not sure	7.5	7.9		7.1	10.4	5.5		7.8
<i>N</i>	2,195	3,259		3,614	1,400	439		5,453
Person older person would like to receive care from in case older person becomes invalid or bedridden								
Spouse	43.9	9.3		27.6	16.6	8.4		23.2
Son	13.3	16.3		15.9	12.9	14.8		15.1
Daughter	30.3	58.5		44.6	51.2	55.5		47.2
Daughter-in-law	1.0	2.5	***	1.6	2.0	3.7	***	1.9
Grandson	0.7	0.7		0.3	1.6	1.4		0.7
Granddaughter	1.8	3.1		1.5	4.4	5.5		2.6
Personal aide	0.2	0.5		0.4	0.1	0.2		0.3
Hospital	0.0	0.0		0.0	0.0	0.2		0.0
Others (e.g., siblings, nieces)	4.8	4.6		4.5	4.8	5.5		4.7
Not sure	3.9	4.5		3.5	6.3	4.8		4.3
<i>N</i>	2,195	3,258		3,613	1,401	438		5,452

Vaccinations	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 person becomes invalid or bedridden								
Spouse	40.7	9.9		26.6	15.6	8.2		22.3
Son	15.3	19.4		19.6	13.9	15.0		17.8
Daughter	29.8	53.3		40.8	48.2	54.9		43.8
Daughter-in-law	1.1	2.6		1.8	2.1	3.4		2.0
Grandson	0.7	0.9	***	0.2	2.1	3.4	***	0.8
Granddaughter	2.1	3.6		1.8	5.2	5.9		3.0
Personal aide	0.4	0.6		0.6	0.1	0.2		0.5
Hospital	0.0	0.0		0.0	0.0	0.2		0.0
Others (e.g., siblings, nieces)	2.9	3.7		2.8	4.1	5.5		3.3
Not sure	7.0	6.1		5.9	8.6	5.0		6.5
<i>N</i>	2,195	3,258		3,613	1,400	439		5,452

*** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

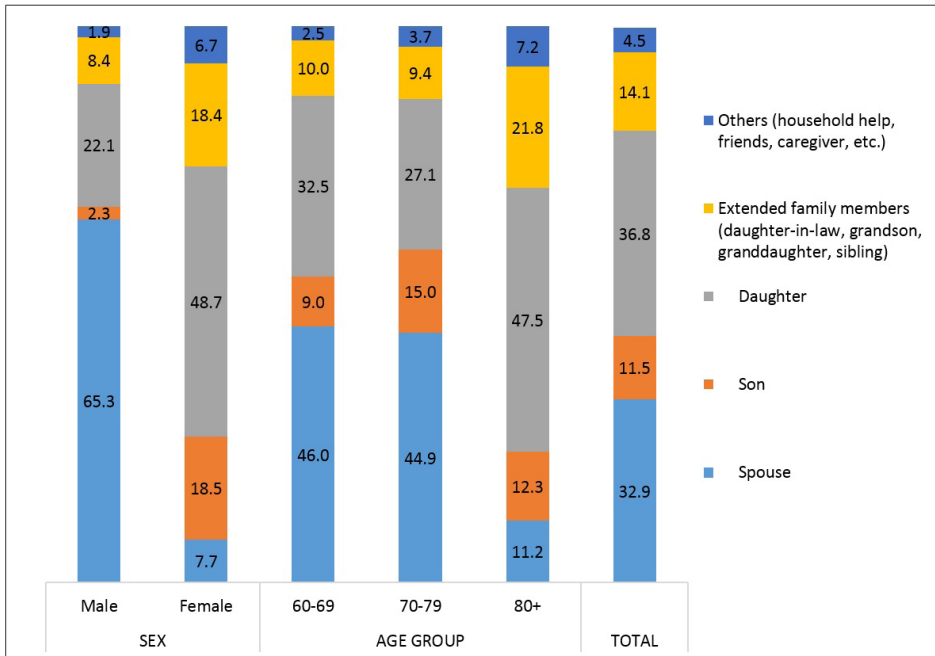
Figure 6.1 presents an overall picture of the type of caregiver of older Filipinos currently under LTC. The percentage distribution of the person providing LTC is much like that of the usual caregiver of the OP during illness after age 60. The three most common are spouse, daughter, and son. The main difference is that slightly more daughters (37%) than spouses (33%) are long-term caregivers. Like men under short-term care, men under LTC are mostly cared for by their spouse, and women by a daughter (Figure 6.1). In 8 of 10 cases, caregiving is confined to members of the nuclear family (spouse and children). The extended family composed of grandchild, daughter-in-law, and sibling, to a limited extent, provides LTC to OPs. Nonfamily members such as household help, caregivers, and friends are reported as main caregivers in less than 5% of the cases.

Future Long-term Care

As OPs age, they are more likely to need care over an extended period. The common reasons for needing LTC are having dementia and being bedridden because of a stroke, a fall, or both.

Respondents were asked from whom they would prefer to receive care if they were to develop dementia or become bedridden or invalids. Results show that in both hypothetical instances, the profile of the preferred caregivers mirrors that of the caregivers of OPs who were under LTC at the time of the survey. The three most

Figure 6.1. Distribution of Main Caregivers of Older Persons Currently Under Long-term Care by Sex and Age (%)



Source: Calculated by DRDF using original LSAHP data.

preferred caregivers are daughter, spouse, and son, in that order. Other preferred caregivers all fall within the same close family circle, including daughter-in-law and grandchild.

Respondents were asked who would most likely take care of them should they develop dementia, be bedridden, or become an invalid. This question and the preceding one are meant to provide a comparison between actual and preferred caregivers in these hypothetical situations. Results indicate a general congruence between preferred and most likely caregivers in both situations. The only minor difference is the slightly higher percentage of 'Not sure' responses to the latter question. None of the respondents mentioned the prevalent care facilities for LTC in more advanced ageing societies, such as hospitals and nursing homes. Evidently, for this cohort of older Filipinos, the provision of LTC in the future remains a female-dominated family responsibility.

Summary, Conclusions, and Recommendations

The observed patterns of healthcare utilisation of older Filipinos show that health seeking is about evenly distributed between public and private facilities, with a slightly higher percentage of OPs going to private facilities for inpatient care and to public facilities for outpatient care. Almost all who were hospitalised in the 12 months prior to the survey availed themselves of PhilHealth benefits either as members or dependents, but PhilHealth covers only part of the cost of hospitalisation. Hospitalisation expenses of half the hospitalised respondents are borne by their children. Other sources of funds for most expenses are the respondents' spouse or the respondents themselves.

As for health seeking from outpatient services such as medical consultation, results show that one in five older Filipinos is constrained from consulting a physician by the lack of financial resources. Since PhilHealth covers neither the cost of outpatient consultation nor medications, high insurance coverage does not address the problem of unmet need for medical consultation.

A notable DOH programme is the provision of free medicines for hypertension and diabetes in public health facilities. LSAHP results show that only 73% of diagnosed hypertensives and 68% of diagnosed diabetics take medication for their condition. Of these, 31% of hypertensives and 18% of diabetics receive their medication from public health facilities all the time. This implies that all other OPs taking medications for hypertension and diabetes pay out of pocket.

Awareness of the DOH's free immunisation services against pneumococcal infection and influenza is low and use of the services even lower, although it is noteworthy that of those who receive these services, the majority go to public health facilities such as barangay health stations, rural health units, and district or community hospitals, where immunisation is free. These services are provided in private health facilities for a fee.

Of all respondents, 8% are under LTC, with mostly a daughter, spouse, or son as the main caregiver, in that order. Men are commonly taken care of by their spouse, and women by a daughter. In this current cohort of older Filipinos, LTC is provided for the most part by close family members.

In anticipation of possible future need for LTC, the LSHP asked respondents who would most likely take care of them should they need LTC because they have dementia or are an invalid or bedridden, and whom they would prefer to care for them in these hypothetical scenarios. The results show a congruence between the respondents' preferred caregivers and those whom the respondents think will care for them. The profile of preferred and likely caregivers is remarkably like the profile of current caregivers – mostly daughters, spouses, and sons, in that order. Evidently, in a pre-ageing population such as the Philippines', the idea of LTC being handed over to nonfamily members, much less to institutional facilities such as nursing homes, is not yet in the consciousness of the current cohort of older Filipinos, some of whom may require LTC.

Given the condition of healthcare utilisation by older Filipinos, the DOH may consider launching a public health campaign to raise awareness amongst older Filipinos of the need to be screened for hypertension and diabetes, the most often diagnosed chronic conditions in this cohort. Public health campaigns should emphasise the need for taking medications for these conditions to prevent early death and disease complications. The DOH is on the right track with its programme to provide free medications for these chronic diseases. The current low use of this service implies that more efforts should be spent to encourage more OPs to avail themselves of free medications. The DOH should more actively publicise its free immunisation programme against pneumonia and influenza amongst OPs as these infectious diseases have more adverse effects when contracted in the older years.

References

- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- Department of Health (2016), *Implementing Guidelines on the Organization of Health Clubs for Patients with Hypertension and Diabetes in Health Facilities* (Administrative Order No. 2016-0014).
- Department of Health (2011), *Implementing Guidelines on Influenza and Pneumococcal Immunization for Indigent Senior Citizens* (Administrative Order No. 2011-0018).
- 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

Christian Joy P. Cruz

Economic well-being is one of the three dimensions of well-being of older persons (OPs) that are key to policy development; the other two are activity levels (work, retirement, and leisure) and health (physical, mental, and emotional) (Hermalin, 2002). Ageing is often associated with a diminishing capacity to fully participate in economically productive activity because advancing age is commonly identified with poorer health, which limits the capacity to work (Cruz, Natividad, Gonzales, and Saito, 2016). This diminishing capacity, coupled with the country's rapid social and economic development, increases the vulnerability of many older Filipinos. As noted by Hermalin (2002), economic vulnerability is the result of the potential obsolescence of OPs' traditional skills because of industrialisation, the absence of comprehensive retirement programmes, and potential isolation as their children migrate to other places (Cowgill, 1974; Treas and Logue, 1986). The OPs may counter these negative economic influences through their income-generating assets and increased levels of support from their children in or outside the Philippines. This chapter addresses the economic well-being of older Filipinos using indicators that measure their income, assets, and liabilities.

Measuring OPs' economic well-being is complex and faces many conceptual and operational issues (Clark, 1989; Hermalin, Chang, and Roan, 2002). For instance, income is often used as an important indicator of well-being although collecting reliable estimates is problematic. Nonresponse and recall problems have also been identified (Hermalin et al., 2002). Beyond these challenges, various dimensions can still be operationalised and used in analyses. The asset and debt situations of OPs are considered major determinants of their ability to secure essential resources and are critical after retirement. Assets may serve as sources of income, whilst portions of income may be funnelled into debt payment.

Following the framework of the interrelationships amongst various dimensions of economic well-being (see Hermalin et al. [2002]: 300), this chapter presents the overall picture of the economic well-being of OPs through an examination of their income sources and levels. This is followed by a discussion of their asset and debt situation. The chapter concludes with an assessment of economic well-being in terms of the reported adequacy of current and historical (until age 16) household income.

Income, Assets, and Liabilities

Table 7.1 shows the sources of income of the OP respondent and his or her spouse (if still alive at the time of the interview). The most commonly cited income sources are children in the country (58%), pension (42%), and earnings from work (34%). Nearly one in every four older Filipinos (23%) mentioned receiving income (i.e. products) from his or her farm. Income from work means salaries and wages from being a farm worker (for those not necessarily owning the land they till) but income from farm includes that derived from products grown on a farm, which is possibly owned but currently not being worked on. Fifteen percent reported money from children abroad as a source of income, confirming the impact of international migration on older Filipinos.

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	44.9	27.0	***	45.6	18.4	7.1	***	34.2
Pension	40.6	43.9	n.s.	35.9	50.8	60.5	***	42.5
Interest of time deposits, savings, and earnings from stocks	1.4	1.7	n.s.	1.9	1.2	0.7	n.s.	1.6
From property and real estate rentals	3.0	1.5	*	2.0	2.1	3.0	n.s.	2.1
Income from family business	7.7	14.0	***	13.8	8.4	5.3	***	11.5
Income from farm	28.4	19.6	***	24.1	20.8	23.5	n.s.	23.2
Money from children within the country	54.8	60.7	n.s.	54.7	62.7	68.5	***	58.3
Money from children outside the country	11.8	16.8	n.s.	15.1	15.2	11.9	n.s.	14.8
Money from other relatives outside the household	9.7	12.0	n.s.	9.5	12.2	17.3	*	11.1
<i>N</i>	2,411	3,574		3,760	1,552	673		5,985

Sources of Income	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean number of sources of income	2.02	1.97	n.s.	2.02	1.92	1.98	n.s.	1.99
N	2,411	3,574		3,760	1,552	673		5,985
Median monthly income (in pesos)								
Currently married	3,000	4,500	n.s.	4,000	3,000	2,500	***	3,500
Not currently married	2,000	2,000	n.s.	2,000	2,000	1,500	***	2,000
ALL	3,000	2,500	n.s.	3,000	2,000	1,500	***	3,000
N	2,411	3,574		3,760	1,552	673		5,985

*p < 0.05. ***p < 0.001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Significantly, more men than women reported earnings from their work, farm, and property and real estate rentals. More women than men are likely to derive income from family business. There is no significant difference by sex with regard to pension as a source of income. In the Philippines, pension coverage is generally for those who are formally employed; those employed in the private sector derive their pension from the Social Security System (SSS), whilst those working in the public sector receive it from the Government Service Insurance System (GSIS). Pension includes receipts from the government's social protection programme that provides a monthly pension of PHP500 to indigent senior citizens. Results show that more widows receive a pension than widowers (52% vs. 46%, data not shown) as wives are more likely to survive their husbands, whose beneficiaries they are. Over half of women are widows whilst a fifth of men are widowers, which may explain the slightly higher proportion of women declaring earning income from pension.

Reliance on pension increases with advancing age, but the overall level remains low at 42%. The proportion of pension recipients ranges from a low of 36% amongst the 60–69-year-olds to a high of 60% amongst those aged 80+. In 2017, 38% of economically active Filipinos contributed to a pension scheme – 4% to GSIS and 34% to SSS (Philippine Statistics Authority, 2019a). Two out of 10 Filipinos aged 60 and over benefited from retirement or old-age pensions in 2017, with average monthly pensions of PHP5,123 for SSS and PHP18,525 for GSIS. Although the average monthly pension is high for GSIS pension recipients, they constitute only 4% of all OPs (Philippine Statistics Authority, 2019a). The minimum SSS pension

of PHP1,200¹ and the GSIS basic pension of PHP5,000² are below the Philippines' poverty threshold of PHP10,481.

The importance of earnings from work declines as age increases, but it is noteworthy that 7% of OPs aged 80+ continue to rely on earnings from work as a source of income despite their advanced age. They are mainly engaged in informal work; for example, a female respondent, 80+ years old, from an urban area walks up to 4 km to buy and sell eggs in her community.

On average, OPs have about two sources of income, regardless of sex and age group. OPs reported a median monthly income of PHP3,000 (~US\$59, assuming an exchange rate of PHP51), with no significant difference by sex. Those not currently married have a lower income level than those currently married (PHP2,000 and PHP3,500, respectively). Substantial income variance was also displayed across age groups regardless of marital status; the youngest age group (60–69) amongst those currently married and not currently married has a higher median income than the oldest age group (80+).

Findings suggest significant gender and age patterns in the OPs' most important income source (Table 7.2). Earnings from work (29%) are the most commonly mentioned major income source, particularly amongst men and those in the youngest age group (60–69). The second most commonly mentioned source is money from children in the country (22%), particularly amongst women and those in the oldest age group (80+). Pension and income from farming are the next most commonly mentioned most important income sources; 7% of OPs reported money from children abroad as their most important income source.

¹ The monthly pension depends on the member's paid contributions, credited years of service (CYS), and the number of dependent minor children that must not exceed five. The monthly pension will be the highest amount resulting from either one of these three pension formulae: (1) the sum of P300 plus 20% of the average monthly salary credit plus 2% of the average monthly salary credit for each credited year of service (CYS) in excess of 10 years; or (2) 40% of the average monthly salary credit; or (3) P1,200, if the CYS is at least 10 but less than 20; or P2,400, if the CYS is 20 or more' (Social Security System, n.d.).

² For the first time in many years, GSIS increased the minimum basic pension to Php5,000 for some 58,000 old-age and disability pensioners beginning January 2013. Also, around 43,000 pensioners who were receiving over Php5,000 but less than Php8,000 were granted a Php200 increment. The additional amounts are on top of the annual 1.5% increase given to them' (Government Service Insurance System Corporate Communications Office, 2016).

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	37.2	23.3		36.6	15.9	7.3		28.9
Pension	20.1	20.3		15.7	27.4	34.4		20.2
Interest of time deposits, savings, and earnings from stocks	0.1	0.0		0.0	0.1	0.2		0.0
From property and real estate rentals	0.8	0.6		0.6	0.9	0.6		0.7
Income from family business	4.0	5.4	***	5.7	3.6	1.9	***	4.8
Income from farm	15.4	13.0		13.9	14.6	12.2		14.0
Money from children within the country	16.1	25.9		18.4	27.0	34.7		21.9
Money from children outside the country	2.9	9.5		6.7	7.9	5.0		6.9
Money from other relatives outside the household	3.3	2.0		2.4	2.7	3.7		2.6
<i>N</i>	2,196	3,260		3,615	1,400	439		5,454

***p < 0.001.

Source: Calculated by DRDF using original LSAHP data.

The indicators of material well-being in the Longitudinal Study of Aging and Health in the Philippines (LSAHP) include possession of material assets and its flipside, having liabilities. Assets in this study are considered tangible – that is, they have a physical form and can be seen or touched. They are either financial (e.g. cash, savings in the bank, interest on time deposits, and business investments) or nonfinancial (e.g. house, other real estate, farm or fishpond, jewellery, appliances, and motor vehicle). OPs were asked if they owned any of the assets in a list. Table 7.3 shows that nearly all OPs have at least one asset, with no significant difference between men and women. Contrary to the general notion of wealth accumulation over time, the proportion of OPs with assets declines with advancing age. The house that the OP resides in is the most widely held nonfinancial asset (85%), followed by appliances (56%) and farms and/or fishponds (19%). Ownership of real estate – a house and/or lot other than their current place of residence – was reported by 15% of OPs. They also reported ownership of motor vehicles (16%) and jewellery (12%). More men than women own tangible nonfinancial assets (the house they currently reside in and motor vehicles). More women than men invest in jewellery.

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	92.7	89.5	n.s.	93.5	87.8	82.8	***	90.8
<i>N</i>	2,411	3,574		3,760	1,552	673		5,985
House currently residing in	87.3	83.4	*	84.9	86.6	81.4	n.s.	85.0
Other real estate	15.7	14.9	n.s.	14.7	16.3	16.1	n.s.	15.2
Cash	10.7	14.2	n.s.	13.4	11.1	13.4	n.s.	12.8
Savings in the bank	3.7	5.2	n.s.	5.6	3.0	2.2	n.s.	4.6
Farm/Fishpond	21.2	17.7	n.s.	19.1	17.8	22.7	n.s.	19.1
Business	8.4	10.0	n.s.	11.6	6.3	2.5	***	9.3
Jewelry	8.2	15.3	***	11.9	12.7	14.4	n.s.	12.4
Appliances	56.5	56.3	n.s.	61.9	47.9	42.3	***	56.4
Motor vehicles	20.1	13.6	*	19.5	10.8	9.7	***	16.3
Others (cellphones, etc.)	1.1	0.4	**	1.1	0.0	0.0	***	0.7
<i>N</i>	2,236	3,200		3,514	1,363	557		5,434
% with liabilities	25.4	22.1	n.s.	29.2	15.8	8.4	***	23.4
<i>N</i>	2,411	3,574		3,760	1,552	673		5,985
Bank loans	8.2	8.4	n.s.	8.8	4.6	16.1	n.s.	8.3
Personal loans	21.8	21.5	n.s.	21.9	20.9	20.3	n.s.	21.7
Amortization for housing	1.2	2.4	n.s.	1.5	3.4	3.4	n.s.	1.9
Loans from money lenders (5-6), pawnshops, credit unions, cooperatives	38.0	46.3	n.s.	46.0	34.0	14.7	***	42.7
Loans from SSS, GSIS	1.6	5.0	n.s.	4.1	1.1	3.4	n.s.	3.6
Others (car loan, home credit, etc.)	20.1	14.4	n.s.	16.2	19.9	16.4	n.s.	16.9
<i>N</i>	611	790		1,100	245	56		1,401

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

GSIS = Government Service Insurance System, SSS = Social Security System.

Source: Calculated by DRDF using original LSAHP data.

Older Filipinos do not have enough financial assets, which are an important buffer in their later years. Only 13% said they have cash, and a much lower proportion (5%) have savings in the bank. Nearly 1 in 10 OPs (9%) has investments in a business venture. Expectedly, the proportion with business ventures, appliances, and motor vehicles declines with advancing age.

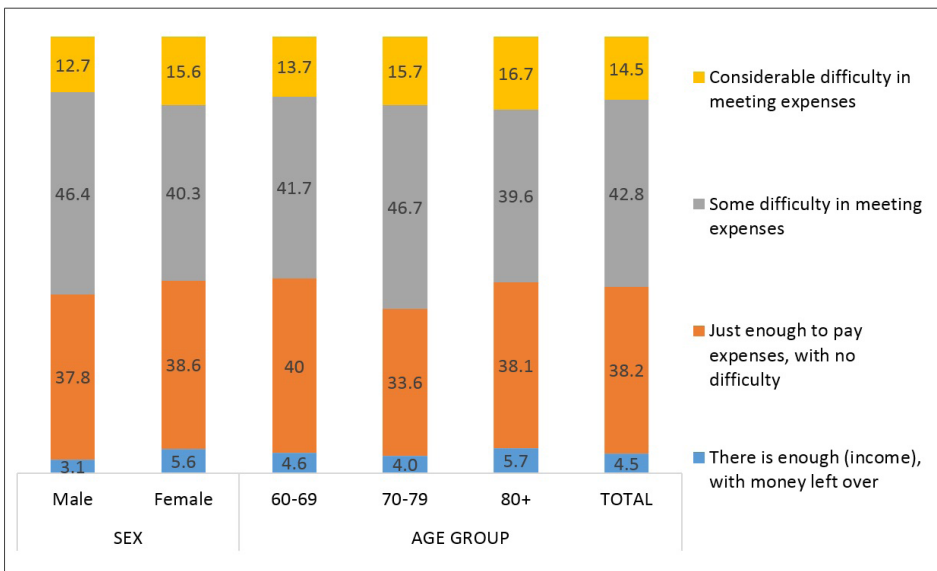
The reverse side of assets is liabilities. Nearly one in four OPs (22%) reported having liabilities. There is an observed age gradient where more OPs in the youngest age group (29%) than in the older age groups (16% for those aged 70–79 and 8% for those aged 80+) reported having liabilities. The most commonly mentioned liability is loans from moneylenders such as pawnshops, credit unions, and cooperatives (43%), followed by personal loans (22%). Loans from moneylenders were more common amongst the youngest age group than the older age groups.

Self-Rated Adequacy of Household Income

Respondents were asked their perception of the sufficiency of their household income in meeting everyday expenses. This information reflects their current self-assessed economic well-being. Household income refers to the pooled income of all earning members of the household, not just the OP's income. The response categories are as follows: (1) there is enough income with money left over, (2) just enough to pay expenses with no difficulty, (3) some difficulty in meeting expenses, and (4) considerable difficulty in meeting expenses.

Figure 7.1 shows that only 4% said they had enough money with some left over, whilst more than a third (38%) reported that their household income was just enough for them to pay expenses with no difficulty. The highest proportion (43%) reported some difficulty in meeting household expenses, whilst 14% said they had considerable difficulty in meeting expenses, representing those in a poor economic state. There was a significant disparity by sex, with more men (59%) than women (56%) reporting some to considerable difficulty in meeting household expenses. In contrast, sufficiency of household income is not significantly different across age groups.

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



Source: Calculated by DRDF using original LSAHP data.

Those who reported some to considerable difficulty in meeting household expenses were asked about their main source of funds to meet the shortfall in income. Nearly half of OPs (46%) ask for money from their children not living in their household (Table 7.4). More than one in every four OPs (26%) borrow from relatives and/or friends to meet this shortfall in household income.

Table 7.4. Sufficiency of Household Income by Sex and Age

Sufficiency of Household Income	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Self-assessed economic well-being								
There is enough (income), with money left over	3.1	5.6		4.6	4.0	5.7		4.6
Just enough to pay expenses, with no difficulty	37.8	38.6	*	40.0	33.6	38.1	n.s.	38.2
Some difficulty in meeting expenses	46.4	40.3		41.7	46.7	39.6		42.8
Considerable difficulty in meeting expenses	12.7	15.6		13.7	15.7	16.7		14.4
<i>N</i>	2,192	3,246		3,610	1,391	437		5,438
Sources of funds to meet income shortfall								
Draw from savings of older person and spouse	0.4	0.2		0.3	0.3	0.1		0.3
Request more money from children	48.2	45.0		40.3	56.7	59.4		46.4
Sell assets	0.5	0.2	n.s.	0.4	0.3	0.0	***	0.3
Borrow from relatives/friends	27.7	24.3		26.2	24.2	27.8		25.8
Borrow from money lenders	7.5	12.0		13.6	4.2	2.2		10.1
Borrow from bank	0.4	1.1		1.1	0.0	1.1		0.8
Others	15.2	17.2		18.1	14.2	9.4		16.4
<i>N</i>	1,297	1,814		1,998	866	245		3,109

* $p < .05$. *** $p < .001$. n.s. = not significant, Sig = 0.05.

Source: Calculated by DRDF using original LSAHP data.

To provide a perspective of the current economic situation of OPs, we inquired about their early life economic status. In particular, we asked the OPs to think about their family whilst they were growing up – from birth to age 16 – and assess if their family then was financially well-off, about average, or poor. Table 7.5 shows that about half of the OPs (49%) grew up in what they considered poor families, whilst half grew up in families that were financially about average; 1%w grew up in well-off families. No significant disparities across sex and age exist.

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	1.2	0.8	n.s.	0.9	0.9	1.7	n.s.	0.9
Average	48.1	51.8		49.2	50.9	57.0		50.3
Poor	50.7	47.5		49.9	48.2	41.4		48.8
N	2,196	3,259		3,615	1,480	439		5,454

n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Summary, Conclusions, and Recommendations

Results show that older Filipinos have generally poor overall economic well-being in terms of objective and subjective measures. Many OPs seem to have been living in poverty over their entire life course, as evident in the high preponderance of those who reported living in poverty in their early life. Other than their best asset, which is ownership of the house they currently reside in, they have generally low income, and few have income-generating assets. OPs have an extremely low level of financial resources, and about one-fourth have debts.

Findings confirm that the family, particularly children, is the traditional source of economic support for older Filipinos. Older females rely heavily on children as their main source of income, trailed by income from work and pension. Remittances from children abroad is the most important income source of 1 in 10 older females, suggesting the significant impact of international migration on the economic status of older Filipinos. Although older women are less likely to have worked, more of them derive income from pension, likely as widows who receive a pension as a dependent of their deceased husband.

Older males present a different economic story. Their economic well-being is mainly driven by income from work and earnings from their farm. Whilst there is a clear drop in the proportion of OPs relying on their own work with increasing age, a significant proportion continue to be productively engaged in their later years (80+) to ensure their personal and family survival. That they continue to live with financial difficulty in their older years is indicative of their inability to accumulate enough assets in their younger years to cover their needs in old age.

As dependence on income from work noticeably drops with advancing age, there is a corresponding increase in the proportion of OPs that rely on transfers from children and pension benefits. However, pension benefits are below subsistence levels.

The generally low economic status of older Filipinos poses a challenge to policymakers and programme managers to develop laws and programme interventions to alleviate the plight of OPs in need. Small steps from the government, such as the launching of the social protection pension plan for indigent older Filipinos in 2017, have helped alleviate but not solve the poverty in which many OPs are trapped. Further studies are needed to guide existing programmes to, amongst others, better target the intended poorest beneficiaries. Future generations of OPs should also be educated to prepare well for their 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. doi:10.1007/bf00116147 (accessed 14 May 2019).
- Cowgill, D.O. (1974), 'Aging and Modernization: A Revision of Theory', in J. F. Gubrium (ed.), *Late Life: Communities and Environmental Policy*. Springfield, IL: Charles C. Thomas, pp.123–46.
- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- Government Service Insurance System Corporate Communications Office (2016), *Reforms in the GSIS*. https://www.gsis.gov.ph/downloads/20160201-GSIS_Reforms.pdf?csrt=7168052740533242649#4 (accessed 7 June 2019).
- 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.101–42.
- 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.

- Philippine Statistics Authority (2019a), 'Decent Work in the Philippines: Statistics on Social Security, *Labstat Updates*, 23(1). <https://psa.gov.ph/content/decent-work-philippines-statistics-social-security-first-series> (accessed 8 June 2019).
- Philippine Statistics Authority (2019b), 'Proportion of Poor Filipinos Registered at 21.0 Percent in the First Semester of 2018', press release. <https://psa.gov.ph/content/proportion-poor-filipinos-registered-210-percent-first-semester-2018> (accessed 6 June 2019).
- Social Security System (n.d.), 'Retirement Benefit'. <https://www.sss.gov.ph/sss/app-manager/pages.jsp?page=retirementpension> (accessed 6 June 2019).
- Treas, J. and B. Logue (1986), 'Economic Development and the Older Population', *Population and Development Review*, 12(4), pp.645–73. doi:10.2307/1973430 (accessed 9 May 2016).

Generativity, Attitudes, and Beliefs

Grace T. Cruz and Maria Karlene Shawn I. Cabaraban

With advancing age, adaptive fitness declines and the balance between gains and losses in developmental outcomes becomes increasingly less positive (Baltes and Smith, 1999). At the tail end of the life course, individuals are challenged to become less focused on their individual success and happiness and more focused on giving back to society and leaving a legacy for others (Einolf, 2014). From a conservation-of-resource perspective, individuals strive to acquire and conserve limited resources following resource loss (Hobfoll, 1989). They do this by drawing upon personal strengths or characteristics (i.e. personal resources) that shape how they view themselves and their environment (Garcia, Bordia, Restubog, and Caines, 2015). With the increasing awareness of one's mortality that comes with age, individuals become selective about how they invest their time and resources, focusing on those that have greater meaning and purpose in their lives. This underscores the salience of generativity.

Generativity is a concept that relates to meaningful activities (Maselko et al., 2014). First described by Erikson (1977: 240), generativity is defined as 'a concern for others and a need to contribute something to the next generation'. It stems from man's tendency to learn from older generations, as well as the latter's need to be needed. Erikson (1997) emphasised that the social relationships older persons (OPs) form throughout the life course provide them with a range of opportunities for involvement, which allow them to feel needed and, hence, circumvent stagnation. Generativity has been variously described as a need, a drive, a concern, a task, and an issue (McAdams and De St. Aubin, 1992). It is associated with a concern to nurture and guide, preserve what is good, and make other things better for the next generation, thus defying one's own mortality. Unlike simple altruism, generativity

involves the generation of concrete outcomes that ultimately benefit and promote the continuity of larger society (McAdams and De St. Aubin, 1992).

Generativity is an essential component of successful ageing (Rowe and Kahn, 1997) because it is an important factor in maintaining one's psychological health in old age (Schoklitsch and Baumann, 2011). A growing body of literature shows its positive association with other health outcomes such as quality of life (Østbye et al., 2018), disability and mortality (Gruenewald, Liao, and Seeman, 2012), and cognitive as well as psychological well-being (An and Cooney, 2006; Maselko et al., 2014; Rothrauff and Cooney, 2008; Tabuchi, Nakagawa, Miura, and Gondo, 2015). The fulfilment of one's generative concern (represented by the OP's values and self-perceptions) through generative actions (participation in behaviours that contribute positively to the next generation) has been shown to contribute to higher levels of life satisfaction amongst OPs (Hofer, Busch, Chasiotis, Kartner, and Campos, 2008; Thiele and Whelan, 2008). Since the publication of Erikson's works, several measures have been proposed to assess generativity amongst the ageing (Schoklitsch and Baumann, 2011). Of these, 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 (Einoff, 2014).

The importance of generativity in gerontological research is evident in the number of emerging studies on the area, although this topic has hardly been explored in the Philippine context. One study using the LGS tried to assess the moderating role of generative concerns in the relationship between psychological contract breach and insomnia amongst full-time Filipino workers who were at least 40 years old (Garcia et al., 2015). So far, no study in the country has covered generativity amongst older Filipinos.

The Longitudinal Study of Aging and Health in the Philippines (LSAHP) is, therefore, significant as a pioneering study on generativity amongst older Filipinos. To measure generative concern, the study used the reduced version of the LGS with six statements from the short form of the original scale as adapted from the 1995 Midlife in the United States Survey. In the LSAHP, 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 response categories were as follows: 0 (*never*), 1 (*occasionally/seldom*), 2 (*fairly often*), and 3 (*very often/nearly always*). We computed for the percentage distribution, mean scores, and standard deviations. Mean generativity score ranges from 0 to 18, with a higher score indicating a higher level of generativity. Analysis was done by age and sex.

Related to the discussion on generativity is an understanding of OPs' attitudes and beliefs regarding a range of issues, including support from children and co-residential living arrangements. Understanding the values and preferences of OPs will help in planning optimal opportunities for physical, social, and mental intervention for this population sector. This is particularly relevant 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. Mounting evidence shows that, in Asia, traditional multigenerational family systems, community, and values of filial piety have weakened with increasing urbanisation (Cheng, 2015; Löckenhoff et al., 2015). This has resulted in 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 roles of females, including their increasing involvement in international migration.

Generativity

Table 8.1 provides the distribution of respondents according to their responses to the generativity statements by sex and age group. On the average, older Filipinos registered an average generativity score of 5.73 from a maximum score of 18. They scored themselves highest on being needed by other people ($M = 1.09$) and having a good influence on the lives of others ($M = 1.03$). Both items also registered the highest proportion who answered either fairly or very often/nearly always (19%

and 17%, respectively). The measures of generative concern with the next highest scores are feeling that many people rely on them for advice ($M = 0.98$), being keen on teaching or imparting knowledge to other people ($M = 0.96$) and making unique contributions to the larger society ($M = 0.87$). The OPs scored themselves lowest on having important skills to pass along to others ($M = 0.80$). More than a third (33%) think they do not have important skills that can be passed along to others. Another 27% 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	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
How often do the following statements apply to older person:								
1. You have important skills you can pass along to others								
Never	29.9	35.5		30.2	39.1	40.2		33.3
Occasionally/Seldom	56.8	54.7	n.s.	58.3	50.2	50.0	n.s.	55.5
Fairly often	11.1	7.6		9.7	7.8	6.6		9.0
Very often/Nearly always	2.2	2.3		1.8	2.9	3.3		2.2
Mean score (s.d.)	0.86 (±0.034)	0.77 (±0.029)	*	0.83 (±0.029)	0.75 (±0.051)	0.73 (±0.058)	n.s.	0.80 (±0.024)
2. Many people come to you for advice								
Never	17.2	19.7		17.7	19.0	25.8		18.7
Occasionally/Seldom	67.5	66.8	*	67.1	68.1	63.7	n.s.	67.1
Fairly often	14.1	10.4		12.9	10.2	9.1		11.9
Very often/Nearly always	1.2	3.2		2.4	2.6	1.5		2.4
Mean score (s.d.)	0.99 (±0.034)	0.97 (±0.025)	n.s.	1.00 (±0.035)	0.96 (±0.029)	0.86 (±0.040)	n.s.	0.98 (±0.023)
3. You feel that other people need you								
Never	13.9	12.8		11.3	16.2	20.5		13.3
Occasionally/Seldom	66.8	68.8	n.s.	68.7	66.9	65.3	n.s.	68.0
Fairly often	15.0	15.4		16.6	12.9	11.6		15.2
Very often/Nearly always	4.3	3.0		3.4	3.9	2.6		3.5
Mean score (s.d.)	1.10 (±0.029)	1.09 (±0.030)	n.s.	1.12 (±0.028)	1.05 (±0.034)	0.96 (±0.044)	**	1.09 (±0.020)
4. You have a good influence on the lives of other people								
Never	13.5	18.8		14.3	20.6	23.9		16.7
Occasionally/Seldom	69.8	64.4	n.s.	69.0	62.0	60.7	***	66.6
Fairly often	14.1	13.7		13.9	14.3	12.1		13.9
Very often/Nearly always	2.6	3.0		2.8	3.0	3.3		2.9
Mean score (s.d.)	1.06 (±0.029)	1.01 (±0.033)	n.s.	1.05 (±0.026)	1.00 (±0.038)	0.95 (±0.054)	n.s.	1.03 (±0.021)

Loyola Generativity	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
5. You like to teach things to other people								
Never	20.8	23.6		21.1	24.0	29.1		22.5
Occasionally/Seldom	63.8	60.4	n.s.	63.1	59.6	58.2	n.s.	61.8
Fairly often	12.5	13.5		13.4	13.5	9.4		13.1
Very often/Nearly always	2.9	2.5		2.4	3.0	3.4		2.7
Mean score (s.d.)	0.97 (±0.042)	0.95 (±0.030)	n.s.	0.97 (±0.043)	0.96 (±0.030)	0.87 (± 0.053)	n.s.	0.96 (±0.027)
6. Others would say you have made unique contributions to society								
Never	23.6	29.1		24.7	30.5	33.7		26.9
Occasionally/Seldom	64.3	59.8	n.s.	63.4	58.7	56.0		61.6
Fairly often	10.0	8.3		9.4	8.3	7.2		9.0
Very often/Nearly always	2.1	2.9		2.5	2.5	3.2		2.6
Mean score (s.d.)	0.91 (±0.031)	0.85 (±0.028)	n.s.	0.90 (±0.029)	0.83 (±0.052)	0.80 (±0.056)	n.s.	0.87 (±- 0.023)
Total score	5.88 (±0.137)	5.63 (±0.141)	n.s.	5.87 (± 0.147)	5.54 (±0.199)	5.17 (±0.265)	n.s.	5.73 (±0.101)
N	2,194	3,258		3,615	1,400	439		5,454

*p<0.05, **p<0.01, ***p<0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

In terms of generative concern, males outscore females in three of the six generativity items: they perceive themselves to be a good influence on others ($M = 1.06$), they feel they have contributed substantially to their community ($M = 0.91$), and they have important skills they think can be handed on to the next generation ($M = 0.86$). In contrast, the proportion of OPs who expressed more negative self-assessment of generativity is consistently higher amongst females. For instance, compared with about a third of males (30%), who said that they do not have important skills they can pass along to the younger generation, the proportion is considerably higher for females at 36%.

Generative concern differs across age groups. Relative to the older cohorts, the youngest cohort (60–69) scored highest in their overall mean generativity scores across all six items. For example, one in five of those in their 60s said that other people need them fairly or very often/nearly all the time, in contrast to only 14% amongst those in the oldest age group (80+). The same pattern emerged for the other five 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 (26%) said they are never approached for counsel; the comparative figures for those in their 60s and 70s are 18% and 19%, respectively.

A considerable proportion of those in their 80s felt that others would never say they have made important contributions to the larger community (34%) and that they never like to teach things to other people (29%).

Attitudes and Beliefs

We inquired about the attitudes and perceptions of older Filipinos regarding selected issues (Table 8.2). Results indicate that most older Filipinos continue to espouse traditional beliefs pertaining to family dynamics, gender roles, and age-appropriate behaviour. The belief that the welfare of their children must be put above all other things, even their own well-being, is almost unanimous (95%). About 9 in 10 (91%) believe that their children are, in turn, obligated to support and take responsibility for their ageing parents; the proportion who believe so increases with age. More than half of the OPs (52%) 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.

Belief in traditional gender roles is prevalent amongst older Filipinos. About three in four OPs (73%) prefer co-residence with a daughter, significantly more so amongst females than males. The proportion who prefer living with a daughter over living with a son is highest amongst the oldest age cohort (80+), with only a quarter of those in their 80s disagreeing with this statement. For older Filipinos, 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) remains the preferred setup, more so for males than females (82% vs. 72%, respectively). The proportion of those who agree with this setup increases with age, from 74% amongst the youngest cohort (60–69) to 85% amongst the oldest cohort (80+), signifying a more traditional set of beliefs and attitudes amongst the latter.

Results show highly conservative attitudes when it comes to romantic relationships, with a great majority not agreeing with the idea of OPs falling in love in their old age. Only 31% are open to the idea, with the proportion significantly higher amongst males. Getting married in their advanced age is even less acceptable, with only a fifth of OPs finding it acceptable for someone in their 60s or older to (re)marry if they find a suitable partner. As expected, the level of acceptance is higher amongst males than females and amongst the younger than the older cohort. These findings are consistent with the prevailing conservative perceptions of traditional gender roles.

Table 8.2. Attitudes and Beliefs by Sex and Age

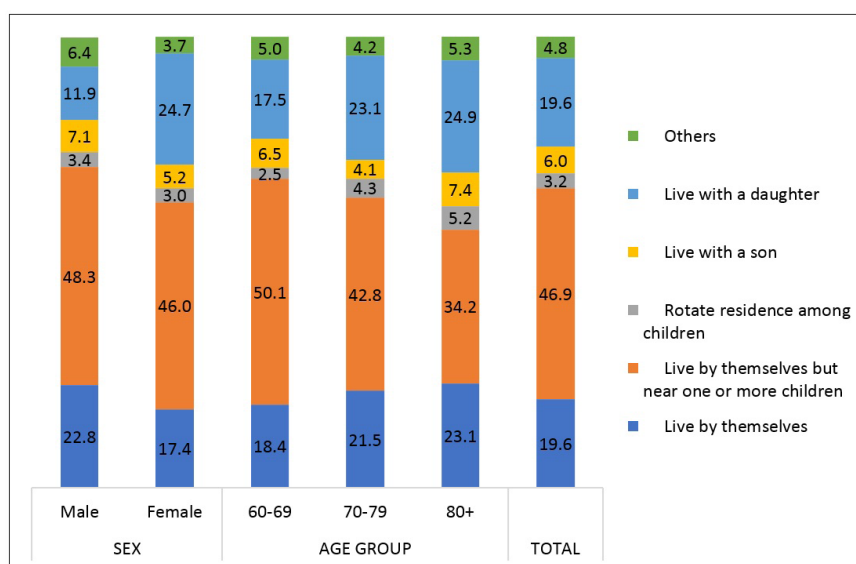
Loyola Generativity	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who agree with the following statements:								
It is the child's duty to support and take care of older/aged parents.	91.3	90.5	n.s.	89.2	92.8	97.0	***	90.8
It is acceptable for someone in their 60's or older to fall in love.	40.8	24.2	***	32.5	27.6	28.0	n.s.	30.9
It is acceptable for someone in their 60's or older to (re)marry if they find a suitable partner.	28.9	15.8	***	22.9	17.3	18.0	*	21.1
It is acceptable for children who looked after their parents to inherit larger portions of their estate when they pass away	50.9	52.2	n.s.	51.6	52.9	48.9	n.s.	51.7
It is better for the elderly parent to live with a daughter than with a son.	65.7	78.4	**	71.4	77.4	75.8	n.s.	73.3
Men should work for the family, and women should stay home and take care of the household.	81.7	71.7	**	73.6	78.3	84.9	*	75.7
It is the parents' duty to do their best for their children even at the expense of their own well-being.	96.2	94.9	n.s.	95.5	95.0	95.6	n.s.	95.4
<i>N</i>	2,195	3,259		3,615	1,400	439		5,454
Best living arrangement for older person according to respondent								
Live by themselves	22.8	17.4		18.4	21.5	23.1		19.6
Live by themselves but near one or more children	48.3	46.0	*	50.1	42.8	34.2	n.s.	46.9
Rotate residence among children	3.4	3.0		2.5	4.3	5.2		3.2
Live with a son	7.1	5.2		6.5	4.1	7.4		6.0
Live with a daughter	11.9	24.7		17.5	23.1	24.9		19.6
Others	6.4	3.7		5.0	4.2	5.3		4.8
<i>N</i>	2,196	3,259		3,615	1,401	438		5,454

*p<0.05. **p<0.01. ***p < 0.001. n.s. = not significant.
 Source: Calculated by DRDF using original LSAHP data.

Ideal Living Arrangement

Although OPs prefer co-residence with a daughter, this is not their ideal living arrangement. OPs perceive themselves as capable of looking after themselves and will therefore eschew co-residence with their children as long as they are capable. This is reflected in the results showing an overwhelming preference for independent living, although some said they would like to live near any of their children. Older males exhibited the greatest desire for independent living (71%); amongst them, 48% want to live alone but near any child (Figure 8.1).

Figure 8.1. Best Living Arrangement of Older Persons by Sex and Age



Source: Calculated by DRDF using original LSHP data.

For OPs, particularly females and the oldest age groups, the next best living arrangement is living with a daughter. A much smaller proportion reported living with a son as the ideal arrangement; more males than females prefer living with a son (7%) than with a daughter (5%). The least preferred living arrangement is rotating residence amongst children.

Summary, Discussion, and Policy Implications

This chapter explored the issue of generativity amongst older Filipinos. Older Filipinos are most predisposed to feel needed by others and have a good influence on the lives of other people. On both counts, those in their 60s showed a higher level of generativity than their older counterparts. Compared with women, men assessed themselves better on feeling recognised for their valuable contributions to society. Regardless of sex, OPs had the poorest self-assessment of their ability to pass on knowledge and teach it to others. Admittedly, it is difficult to assess older Filipinos' overall generativity given the absence of a precedent study in the Philippine context. Future studies could explore the factors that explain the observed variability in the OPs' generativity. To what extent are these outcomes explained by their lower education compared with the younger generation to whom they are expected to pass on their skills and knowledge? What is the role of OPs' dependence on their children for financial, material, and instrumental support in explaining 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, Nakagawa, Miura, and Gondo, 2015). Many of these questions can be addressed with follow-up data from a panel survey.

Our findings shed light on OPs' views and expectations. In the context of their rapidly changing environment, are older Filipinos able to preserve traditional beliefs and attitudes regarding filial responsibilities, gender expectations, and age-appropriate behaviours? Results show 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. In the Philippine context, this is the concept of *utang na loob* (debt of gratitude) (Hollnsteiner, 1973). Older parents in some Asian economies such as Taiwan, Japan, and the Republic of Korea look to their sons to assume caretaking responsibilities, but findings from the previous two surveys of OPs in the Philippines did not reveal a similar pattern. The 1996 Philippine Elderly Survey indicated a more gender-neutral preference in terms of intergenerational family support (Biddlecom, Chayovan, and Ofstedal, 2002). However, in a different sample about a decade later, in the 2007 Philippine Study on Aging, a preference for co-residence with a daughter became more pronounced. The LSAHP results reflect this gendered pattern of filial expectation. When asked if they would be better off living with a son or daughter, a

higher proportion of OPs were found to be keener on living with a daughter rather than a son. This is congruent with OPs' belief that household responsibilities are given to women whilst income generation is assigned to men.

Despite the prevalence of gendered filial expectations, co-residence with children is by no means the most preferred living arrangement. Whilst proximity to children is ideal, the results indicate OPs' greater desire to live in a separate household – a finding that should be considered when planning programmes and policies for older Filipinos.

References

- ASEAN (2015), 'KuAn, 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. doi:10.1177/0165025406071489 (accessed 7 June 2019).
- Baltes, P.B. and J. Smith (1999), 'Multilevel and Systematic Analyses of Old Age: Theoretical and Empirical Evidence for a Fourth Age', in V. L. Bengtson and K. W. Schaie (eds.), *Handbook of Theories of Aging*. New York, NY: Springer Publishing Company, pp.153–73.
- Biddlecom, A., N. Chayovan and M.B. Ofstedal (2002), 'Intergenerational Support and Transfers', in A. Hermalin (ed.), *The Well-being of the Elderly in Asia: A Four-country Comparative Study*. Ann Arbor, MI: University of Michigan Press, pp.185–229.
- 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), 473–91. doi:10.1080/13600810601045833 (accessed 11 June 2019).
- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito, Y. (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- Einolf, C.J. (2014), 'Stability and Change in Generative Concern: Evidence from a Longitudinal Survey', *Journal of Research in Personality*, 51, pp.54–61. doi: <http://dx.doi.org/10.1016/j.jrp.2014.04.003> (accessed 7 June 2019).

- Erikson, E.H. (1977), *Childhood and Society*. London, England: Paladin Grafton Books. (Originally published 1950.).
- Erikson, E.H. (1997), *The Life Cycle Completed: Extended Version with New Chapters on the Ninth Stage of Development*. New York, NY: Norton.
- 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. doi:10.1002/job.2222 (accessed 17 June 2019).
- 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. doi:10.1093/geronb/gbs034 (accessed 17 June 2019).
- Hobfoll, S.E. (1989), 'Conservation of Resources: A New Attempt at Conceptualizing Stress', *American Psychologist*, 44(3), pp.513–24. doi: 10.1037/0003-066X.44.3.513 (accessed 24 June 2019).
- 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. doi:10.1111/j.1467-6494.2007.00478.x (accessed 7 June 2019).
- Hollnsteiner, M. (1973), 'Reciprocity in the Lowland Philippines', in F. Lynch and A. Guzman II (eds.), *Four Readings on Philippine Values*. Quezon City: Ateneo de Manila Press.
- 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, D. 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*, 621, pp.1707–13. doi:10.1111/jgs.12985 (accessed 17 June 2019).
- 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. doi:10.1177/1010539518772191 (accessed 17 June 2019).
- 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. doi:10.1007/s10804-008-9046-7 (accessed 7 June 2019).
- Rowe, J.W. and R.L. Kahn (1997), 'Successful Aging', *The Gerontologist*, 37(4), pp.433–40. <https://academic.oup.com/gerontologist/article-pdf/37/4/433/.../37-4-433.pdf> (accessed 19 June 2019).
- Schoklitsch, A. and U. Baumann (2011), 'Generativity and Aging: A Promising Future Research Topic?' *Journal of Aging Studies*, 26, pp.262–72. doi:10.1016/j.jaging.2012.01.002 (accessed 7 June 2019).
- 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. doi:10.1093/geront/gnt135 (accessed 23 June 2019).
- Thiele, D.M. and T.A. Whelan (2008), 'The Relationship Between Grandparent Satisfaction, Meaning, and Generativity', *International Journal of Aging and Human Development*, 66(1), pp.21–48. doi:10.2190/AG.66.1.b (accessed 7 June 2019).

Activities, Social Isolation, and Information Technology

Nimfa B. Ogena

As people age, their physiological, social, and economic conditions change. Associated adjustments are often manifested through the activities of older persons (OPs) within the context of their perceived sociocultural expectations and the evolving digital technologies of the period.

Activities of Older Persons

How OPs spend their time provides a glimpse of their quality of life, which in turn is associated with their social roles and health status, amongst others. Family roles and adult engagement in the workforce shape Filipinos' perception of ageing as a responsibility (Valdez et al., 2013). Retirement often signals a person's role shift from being an active economic provider for the family, as younger members of the family are tasked to take on the economic lead, to a role with less economic burden. Therefore, OPs have greater liberty to choose activities that they are interested in pursuing given their physiological condition.

Activities

In the Longitudinal Study of Aging and Health in the Philippines (LSAHP), respondents were asked how often they are engaged in a list of activities. Daily activities are classified as sedentary, physical, and social. Sedentary activities include listening to the radio, reading, and watching TV, while physical activities include physical exercises and gardening. Separated are social activities such as hanging out with friends and neighbours, the main intent of which is to socialise.

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	22.4	23.7	n.s.	23.4	23.6	20.9	n.s.	23.2
Reads newspapers, magazines or books	4.7	1.7	**	3.3	2.3	2.2	n.s.	2.9
Watches TV	64.9	66.0	n.s.	70.5	60.5	49.7	***	65.6
Physical exercises	55.3	50.3	n.s.	52.9	53.2	47.1	n.s.	52.3
Gardening	26.1	27.3	n.s.	28.8	27.6	13.8	***	26.8
Hangout with friends and neighbors	22.0	26.6	n.s.	26.1	23.2	20.6	n.s.	24.8
% of older person who do the following activities at least once a month:								
Watches movies outside the house	3.8	3.5	n.s.	3.5	4.8	1.8	n.s.	3.6
Attend social activities	34.7	35.4	n.s.	40.4	29.6	18.4	***	35.1
Gambling for leisure	10.5	4.5	***	7.4	6.9	4.0	n.s.	6.9
N	2,411	3,573		3,760	1,551	673		5,984

p < 0.01. , *p < 0.001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

The LSAHP data reveal that watching TV (66%), physical exercises (52%), and gardening (27%) are the top three daily activities of older Filipinos (Table 9.1). Physical exercises include walking, jogging, dancing, aerobics, and Zumba. Other daily activities of OPs are listening to the radio (23%) and hanging out with friends and neighbours (25%). Not surprising is the low proportion of OPs who read newspapers, magazines, or books (3%) as OPs may have switched from print media to TV and electronic gadgets as their main source of information.

The activities of male and female OPs appear to vary. While more females than males hang out daily with friends and neighbours, more males than females perform the other activities daily such as physical exercises and reading information materials.

Age differentials for the daily activities of OPs were also found. The proportion of OPs who watch TV and engage in gardening significantly declines with age. While sedentary and physical activities of OPs are more prevalent on a daily basis, social activities are less frequent. Only one in three (35%) OPs attend social activities at least once a month. Activities less frequently done by OPs are watching movies outside the house (4%) and gambling for leisure (7%). More male OPs gamble for leisure compared to female OPs (11% and 5%, respectively).

Gambling in the Philippines are varied and may be classified as either sedentary or social. Examples of common gambling activities in the country include, but are not limited to, sweepstakes, card games, cockfighting, and horse-race betting. The OP's age is inversely related to attendance in social activities and gambling for leisure.

Religiosity and Ageing

With lower economic expectations from the family, focusing on spirituality and/or religion may provide OPs with an alternative mechanism for occupying their time and efforts as they age. When asked about their religious activities, the majority (76%) of OPs reported attending religious services outside the home, but less than one in four OPs said they attend prayer meetings, Bible studies, or related religious activities outside the home (Table 9.2). More than half of the OPs (57%) pray alone or in a private place, while 24% perform religious activities at home with other family members. Moreover, 38% of OPs watch or listen to religious activities through TV or radio, and more than one in four (27%) OPs read the Bible or religious materials. More female than male OPs perform these religious activities. Those aged 60–69 are more involved in these religious activities than their older counterparts and the proportion declines as age increases.

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	65.5	83.2	***	80.9	72.4	57.7	***	76.1
Attends religious activities outside the home (prayer meeting, bible studies, etc.)	17.8	28.3	***	25.0	24.5	17.8	n.s.	24.1
Prays alone or privately in places other than a public place of worship	47.0	63.0	***	57.8	56.0	51.1	n.s.	56.6
Performs religious activities at home with other family members	16.0	29.6	***	25.8	23.7	16.0	n.s.	24.1
Watches or listens to religious activities through TV or radio	33.5	40.4	n.s.	41.2	33.2	27.8	***	37.6
Reads the Bible or any religious materials	19.2	31.9	***	29.7	24.9	14.7	**	26.8
N	2,411	3,574		3,760	1,552	673		5,985

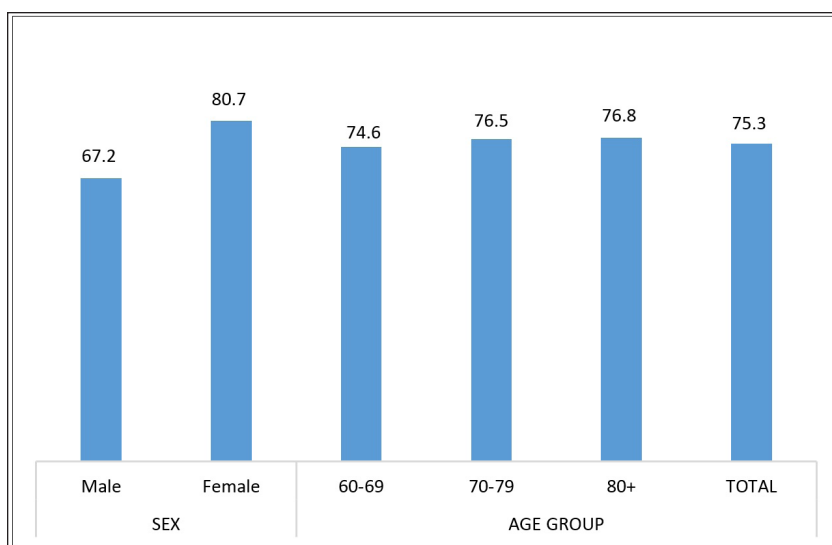
Religious Activities	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who are currently members of any religious group or organization	5.8	16.3	***	12.7	12.1	8.6	n.s.	12.1
N	2,411	3,574		3,760	1,552	673		5,985
% who said religion is very important in their life	67.2	80.7	***	74.6	76.6	76.7	n.s.	75.3
N	2,195	3,259		3,615	1,401	439		5,455

p < 0.01. , *p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Although three in four (75%) OPs consider religion very important in their lives, membership in organisations within their respective religion is low at 12%. Some examples of religious organisations in the Philippines are the Knights of Columbus, Catholic Women's League, Couples for Christ, amongst others. Females and those aged 60–69 have a higher membership in religious organisations than their counterparts. More females than males indicated the importance of religion in their lives (Figure 9.1).

Figure 9.1. Percent of Older Filipinos Who Said Religion is Very Important in Their Lives by Sex and Age



Source: Calculated by DRDF using original LSAHP data.

Membership in Organisations and Volunteerism

Other social activities of OPs are with nonreligious organisations. About 3 in 10 (31%) OPs are members of any type of nonreligious organisation (Table 9.3). More OPs aged 80 and above (33%) indicated their membership in nonreligious organisations while those aged 70–79 have the lowest proportion (28%) of membership in nonreligious organisations.

Table 9.3. Membership in Organizations 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 organizations	31.1	31.3	n.s.	31.9	28.5	33.1	n.s.	31.2
<i>N</i>	2,411	3,573		3,760	1,552	673		5,985
Types of organizations								
Business professional or farm associations	10.4	7.4	n.s.	11.8	2.7	3.4	***	8.6
Political groups	0.5	1.1	n.s.	1.2	0.2	0.0	***	0.8
Community centers or social or recreational clubs	3.0	4.9	n.s.	5.5	1.3	2.1	**	4.1
Clan associations	0.8	0.8	n.s.	0.9	0.9	0.3	n.s.	0.8
Organisations of retired older persons	14.0	14.7	n.s.	12.3	21.6	11.4	*	14.4
% who are engaged in any volunteer work in church or community	6.4	18.8	***	17.0	9.8	4.7	*	13.8
<i>N</i>	764	1,136		1,219	453	227		1,900

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

Source: Calculated by DRDF using original LSAHP data.

As to the types of nonreligious organisations that OPs are members of, the most common are organisations of retired OPs (14%), followed by business professional or farm associations (9%), and community centres or social or recreational clubs (4%). There are a few age differentials as to the types of nonreligious organisations in which the OPs are members. Significantly more OPs aged 60–69 are members of business professional or farm associations, community centres or social or recreational clubs, and political groups while more OPs aged 70–79 are members of organisations of retired OPs compared to their counterparts.

Only 14% of OPs are engaged in volunteer work in church or the community. Compared to their respective counterparts, more females and OPs aged 60–69 reported being engaged in such volunteer work.

Social Isolation

With decreasing economic resources, mobility impairment, and deaths of contemporaries, OPs are at risk of social isolation and loneliness. Social isolation is an 'objective and quantifiable reflection of reduced social network size and paucity of social contacts' (Steptoe et al., 2013, p. 5797). Two forms of social isolation were noted by Cornwell and Waite (2009): social disconnectedness and perceived isolation. The former is the lack of contact with their social network, disinterest in social activities, and lack of participation in their social groups, while the latter is the subjective or more personal experience from which the sense of loneliness comes due to the feeling of an absence of support and companionship. 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. In addition, other studies have shown the gendered experience of loneliness in the context of social networks. A study by Takagi et al. (forthcoming) of older Singaporeans noted the different patterns of social relationships for loneliness in terms of gender. Older women are experiencing higher levels of loneliness despite having a stronger social network which may be due to unmet psychological needs, whereas older men are using their social relationships to alleviate loneliness.

Loneliness

The LSHP used the three-item loneliness scale of the University of California, Los Angeles (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. These were not asked of proxy respondents but directly of the OPs themselves.

The LSHP data reveal that, overall, loneliness amongst older Filipinos is relatively low. The majority of OPs (75%) rarely or never feel a lack of companionship (Table 9.4). However, about 1 in 10 (10%) OPs expressed that they fairly often or always feel the need for more companionship. This need was expressed more by female than male OPs. Only 7% of OPs said they always or fairly often feel left out in various situations while about 6% of OPs feel they are always or fairly often isolated from others.

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	2.0	3.4		2.9	2.3	3.7		2.8
Fairly often	6.6	8.3		7.1	8.5	8.8		7.6
Occasionally	11.7	16.1	n.s.	13.5	15.2	18.3	n.s.	14.3
Rarely	43.1	40.3		43.4	37.3	38.1		41.4
Never	36.7	31.9		33.0	36.8	31.1		33.8
Feels left out								
Always	2.3	1.9		1.5	3.4	2.5		2.1
Fairly often	3.1	5.5		4.3	4.6	6.1		4.5
Occasionally	11.8	12.7	n.s.	11.4	13.2	17.5	n.s.	12.3
Rarely	38.6	40.0		40.5	37.4	37.4		39.5
Never	44.2	39.9		42.3	41.3	36.4		41.6
Feels isolated from others								
Always	1.3	2.0		1.6	2.1	1.1		1.7
Fairly often	2.9	5.0		3.5	5.1	6.8		4.2
Occasionally	10.3	10.8	n.s.	9.4	12.7	13.6	n.s.	10.6
Rarely	40.8	38.5		40.4	37.4	38.3		39.4
Never	44.7	43.8		45.2	42.7	40.3		44.1
N	2,195	3,259		3,615	1,400	440		5,454

n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Social Isolation from Relatives Not Co-residing with the OP

To assess social isolation of OPs in the Philippines, the LSAHP used the abbreviated version of the Lubben Social Network Scale also known as LSNS-6 (Lubben and Girona, 2004; Lubben et al., 2006) based on six questions. Similar to questions on loneliness, these questions were not asked of proxy respondents but directly of the OPs themselves.

Three measures are constructed from the LSNS-6: a Family subscale, a Friends subscale, and a total score. The Family subscale is constructed from three LSNS-6 questions that ask about relatives (e.g. children, grandchildren, in-laws, siblings, nieces, nephews, cousins, uncles, and aunts) who are not living with the respondent. Questions regarding non-co-resident relatives include the following: 'How many relatives do you see or hear from at least once a month?', 'How many relatives do you feel at ease with that you can talk about private matters?', and 'How many relatives do you feel close to such that you could call on them for help?' The Friends subscale is constructed from three similar questions that are asked about non-family members.

A total score for LSNS-6 ranging from 0 to 30 is computed as the sum of scores from six questions that are equally weighted. A higher score indicates more social engagement (Lubben and Gironde, 2004).

After evaluating the LSNS-6 amongst a sample of older adults in Hamburg (Germany), Solothurn (Switzerland), and London (United Kingdom), Lubben et al. (2006) recommended the inclusion of LSNS-6 in practice protocols of gerontological practitioners using clinical cut points to facilitate the identification of at-risk population that could then be further assessed and for whom interventions might be developed. Socially isolated individuals with a total score of less than 12, on average, have fewer than two individuals for the six aspects of social networks assessed by the LSNS-6. Similarly, those with scores of less than 6 on the three-item LSNS-6 Family subscale are considered to have marginal family ties; those with scores of less than 6 on the three-item LSNS-6 Friends subscale are considered to have marginal friendships (Lubben et al., 2006).

When asked about the OPs' relationships with relatives not living with them, a small proportion expressed feelings that may be related to social isolation. Only 5% reported not having any relatives to see or hear from at least once a month, 14% said they do not have any relatives whom they feel at ease with to talk about private matters, and 12% said they do not have relatives whom they feel close enough to call on for help (Table 9.5).

The proportion who reported they do not have any relatives to contact with at least once a month is highest amongst the oldest age cohort (80 and above). Moreover, more males than females do not have any relatives whom they feel at ease with talking about private matters, and do not have any relatives whom they feel close to such that they could call on them for help. Such proportions for the latter two questions are also lowest in the youngest age cohort (60–69).

OPs were also asked about the frequency of contact for various reasons with relatives not living with them. Only 3% never saw or heard from relatives with whom they have the most contact, suggesting that nearly all OPs have relatively active contact with their relatives. Again, the proportion who never see or hear from relatives with whom they have the most contact is lowest amongst those aged 60–69 compared to their older counterparts.

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	4.2	6.1	n.s.	4.6	6.4	7.7	n.s.	5.3
% who do not have any relatives whom they feel at ease with that the older person can talk about private matters	16.1	13.2	*	12.7	17.3	19.1	n.s.	14.4
% who do not have any relatives whom they feel close to such that the older person could call on them for help	13.2	11.2	*	11.1	13.5	14.9	n.s.	12.0
<i>N</i>	2,196	3,258		3,615	1,400	439		5,454
% who never see or hear from relatives with whom older person have the most contact	3.7	3.1	n.s.	2.8	4.1	5.6	n.s.	3.4
% who never get consulted when one of the relatives has an important decision to make	12.4	9.7	n.s.	9.0	14.3	14.2	n.s.	10.8
% who never get to talk with any of the relatives when older person have an important decision to make	10.7	11.1	n.s.	9.5	13.7	14.0	n.s.	10.9
<i>N</i>	2,196	3,259		3,615	1,401	440		5,456
% who have marginal family ties ^a	23.7	28.7	n.s.	24.5	31.0	31.2	*	26.7
<i>N</i>	2,196	3,258		3,615	1,400	439		5,454
Satisfaction with the level of contact with relatives								
Very satisfied	9.6	11.1		10.2	11.1	11.4		10.5
Satisfied	80.4	77.8		79.2	77.8	78.9		78.8
Unsatisfied	7.5	8.8	n.s.	8.0	9.3	7.3	n.s.	8.3
Very unsatisfied	0.5	1.1		0.9	0.6	1.3		0.8
Not sure	2.1	1.2		1.7	1.2	1.2		1.6
<i>N</i>	2,196	3,258		3,615	1,399	439		5,453

^a6-item scale with 6 as the cut-off score

*p < 0.05. n.s. = not significant.

Source: Calculated by DRDF using original LSHP data.

About 11% of OPs feel they never get consulted when one of their relatives has an important decision to make. Similarly, 11% of OPs said they never get to talk with any of their relatives when the OPs have an important decision to make. More males than females said they never get consulted when a relative has an important decision to make while more females than males said that they never get a chance to talk with relatives when they have an important decision to make. Differentials were also found by age. Compared with their counterparts, those aged 70 and above feel left out when their relatives make major decisions.

Using the LSNS-6 Family subscale, 27% of the OPs were found to have marginal family ties. This suggests that, on average, nearly 3 of 10 respondents would each have fewer than two relatives to perform social integration functions assessed by LSNS-6 (Table 9.5). The proportion of OPs that have weak social ties with non-co-resident family members increases as age increases.

Nevertheless, a majority of OPs (89%) were either very satisfied or satisfied when OPs were asked to rate their level of satisfaction with their contact with relatives. More female than male OPs were not satisfied with their level of contact with relatives.

Social Isolation from Friends

The same questions on social isolation were asked in relation to the OPs' friends, including those who live in their neighbourhood. About 5% of OPs reported having any friends to see or hear from at least once a month (Table 9.6). The proportion who reported this was higher for males and those aged 80 and over.

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	6.5	4.7	*	5.5	4.1	8.8	n.s.	5.4
% who do not have any friends whom they feel at ease with that the older person can talk about private matters	21.9	20.1	*	19.8	21.1	27.9	n.s.	20.8
% who do not have any friends whom they feel close to such that the older person could call on them for help	17.3	19.2	n.s.	17.6	17.7	26.9	n.s.	18.4
<i>N</i>	2,196	3,259		3,614	1,400	439		5,454
% who never see or hear from friends with whom older person have the most contact	7.1	5.2	n.s.	5.6	5.5	9.8	n.s.	5.9
% who never get consulted when one of the friends has an important decision to make	14.8	12.7	n.s.	13.2	13.3	17.0	n.s.	13.5
% who never get to talk with any of the friends when older person have an important decision to make	14.2	15.2	n.s.	14.5	14.1	19.6	n.s.	14.8
<i>N</i>	2,196	3,260		3,615	1,401	440		5,454
% who have marginal friendship ties ^a	23.4	29.7	n.s.	25.0	29.6	37.2	*	27.2
<i>N</i>	2,196	3,258		3,615	1,400	439		5,454
% who are socially isolated ^b	21.9	28.7	**	22.9	31.3	33.8	**	25.9
<i>N</i>	2,196	3,258		3,615	1,400	439		5,454

Social Isolation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Satisfaction with the level of contact with friends								
Very satisfied	5.0	6.6		6.1	5.7	5.2		5.9
Satisfied	86.9	82.9		85.5	82.9	82.0		84.5
Unsatisfied	4.1	8.6	*	5.5	9.3	9.2	n.s.	6.8
Very unsatisfied	0.4	0.5		0.3	0.5	1.5		0.4
Not sure	3.6	1.4		2.7	1.5	2.2		2.3
N	2,195	3,260		3,615	1,401	439		5,455

^a6-item scale with 6 as the cut-off score.

^b12-item scale with 12 as the cut-off score.

*p < 0.05. **p < 0.01. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

About one in five (21%) OPs do not have any friends whom they feel at ease with to talk about private matters. The proportion who feel this way is higher amongst males than females and amongst those aged 70 and higher compared to the youngest age cohort (60–69).

About 18% of OPs do not have any friends whom they feel close enough to call for help. This feeling was expressed more by females than males, and the proportion of OPs who feel this way increases with age.

About 6% of OPs reported never seeing or hearing from friends with whom they have the most contact, and about 14% of OPs feel they never get consulted when one of their friends has an important decision to make. Males and those aged 80 and over registered the largest proportions in both instances. Fifteen percent of OPs said they never get to talk with any of their friends when they have an important decision to make. The proportion who feel this way is higher amongst females and those aged 80 or over.

Using the LSNS-6 Friends subscale, 27% of the OPs were found to have marginal friendship ties. This suggests that, on average, nearly 3 of 10 respondents would each have fewer than two friends to perform social integration functions assessed by LSNS-6 (Table 9.5). The proportion of OPs that have weak social ties with non-family members increases with age.

On the other hand, the LSNS-6 total score reveals that 26% of the OPs are socially isolated (Table 9.5). These individuals, on average, have fewer than two family members or friends identified in the six aspects of social networks assessed by the LSNS-6. More females than males (29% vs 22%) are socially isolated. The proportion of OPs that have weak social ties increases as age increases.

The majority (90%) of OPs are satisfied or very satisfied with their overall level of contact with friends. Only 7% are either unsatisfied or very unsatisfied, with a higher proportion amongst females than males. The proportion who are unsatisfied or very unsatisfied with the level of contact with friends is highest for those in age 80 or higher. About 2% are not sure of how they feel regarding their level of contact with friends.

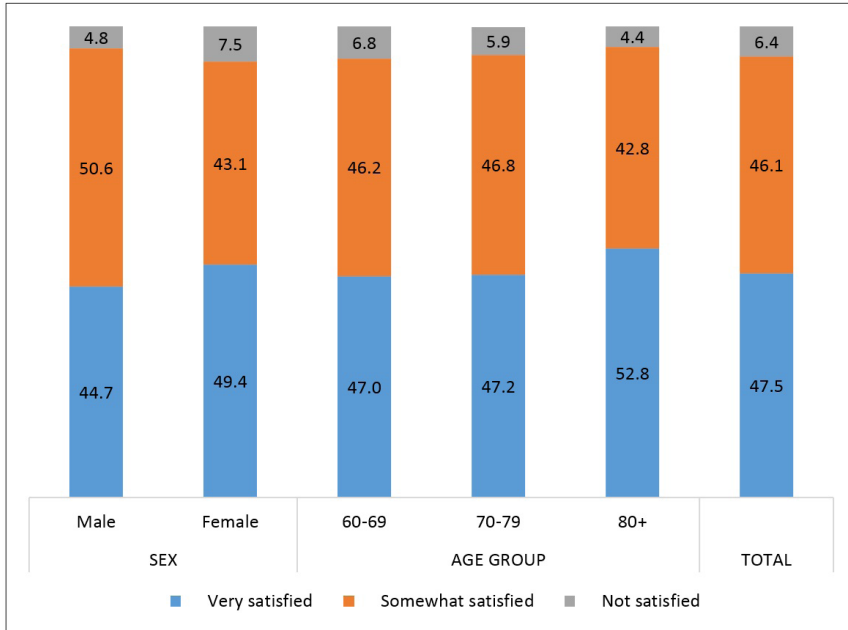
Life Satisfaction

Life satisfaction is a subjective measure of the person's overall evaluation of his or her life. In the LSAHP, life satisfaction is directly assessed from the answer to the question 'Are you satisfied with your life at present?' The possible responses are 'Yes, very satisfied,' 'Yes, satisfied,' and 'No, not satisfied.' Research has shown that life satisfaction is based on both subjective and objective conditions. Across studies, there is no consistent association with age, although life satisfaction tends to dip in the oldest ages (Baird et al., 2010; Chen, 2001).

The LSAHP results indicate that a great majority of older Filipinos are satisfied with their lives: 48% are very satisfied and 46% are satisfied. Only 6% report being unsatisfied (Figure 9.2). The proportion who are not satisfied decreases with age while correspondingly the proportion of very satisfied increases with age. More women than men are unsatisfied with their lives; the proportion of OPs who said they are very satisfied is also higher amongst women.

Another dimension of well-being explored in the LSAHP is self-assessed connectedness with family, relatives, and friends – a possible indicator of the closeness of social ties. The question asked was 'How much do you feel that family, relatives, or friends are willing to listen when you need to talk about your worries and problems?'

Figure 9.2: Current Life Satisfaction, by Sex and Age



Source: Calculated by DRDF using original LSAHP data.

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	44.7	49.4		47.0	47.2	52.8		47.5
Somewhat satisfied	50.6	43.1	n.s.	46.2	46.8	42.8	n.s.	46.1
Not satisfied	4.8	7.5		6.8	5.9	4.4		6.4
<i>N</i>	2,196	3,260		3,615	1,400	439		5,454
% 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	13.7	14.2	n.s.	13.9	14.1	15.0	n.s.	14.0
Quite a bit	50.5	54.9		53.2	52.8	53.4		53.1
Some	20.5	16.9		17.8	19.7	18.7		18.3
Very little	7.6	5.8		7.0	6.2	3.5		6.5
Not at all	1.2	0.3		0.5	1.0	0.9		0.7
Keep to myself	6.4	8.0		7.7	6.2	8.4		7.4
<i>N</i>	2,164	3,231		3,584	1,380	428		5,392

n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Results show that the great majority of OPs feel they can share problems and worries with family and friends because the latter have a great deal of, quite a bit, or some willingness to listen to them. A small minority (7%) report that their family/friends have very little or no willingness at all to listen to them, while another 7% say they keep to themselves and do not share their problems/worries. More women than men keep to themselves, while more men than women say their family and friends have little or no willingness to listen to them. More of the youngest age cohort feel that others have little or no willingness to listen to them, and more of the oldest age group keep to themselves.

Use of Information Technology

Over the past 2 decades, the rapid improvements in information technology (IT) have introduced new digital gadgets that have continuously challenged the adjustment of OPs. However, Pullum and Akyil (2017) noted that senior digital migrants have lower levels of social isolation because they communicate with their relatives and friends through the Internet.

The LSAHP data reveal that about 6% of the OPs have access to internet (Table 9.8) and spend an average of 2 hours daily on the Internet. Females have higher access to the Internet than males (8% vs 3%) but males spend more time on the Internet than females (3.2 hours vs 1.8 hours). There are also age differentials. Access to the Internet varies by age. Those aged 70–79 spend more time, on average, on the Internet than their counterparts (3.4 hours). The majority (90%) have a social networking account; amongst them, the most common type is Facebook (99%), followed by YouTube (19%).

About 3 in 10 OPs own cell phones. The proportion is higher amongst females than males (33% vs 27%), but daily use of cell phones is higher for males than females (1.4 hours vs 0.8 hours). Expectedly, the mean number of hours of cell phone use per day decreases with advancing age.

Tablet ownership is rare amongst the OPs (3%). More females than males own tablets (5% vs 0.8%), and the proportion of those who own a tablet is highest in the youngest age cohort (60–69) compared with those 70 and older. Those aged 60–69 also spend the most time, on average, on tablet use per day (3.2 hours) compared to their counterparts.

Only 1% of OPs own a laptop, with an average of 0.1 hours of usage per day. More females than males own laptops, and the proportion of laptop ownership is highest amongst those aged 60–69.

The top five mentioned uses of IT gadgets are for calling friends and family (94%), chatting/messaging (22%), voice or video calls (18%), sending or receiving emails (18%), and watching movies and TV shows and listening to music (16%). Some OPs also use IT gadgets for playing videos or computer games (10%) and for reading e-books, magazines, and online news (7%). Internet banking was the least mentioned use of IT gadgets by OPs (0.3%). More females than males reported using IT gadgets for these purposes. The proportion who use IT gadgets to call friends and family or to play video/computer games decreases with age, but those in the oldest age group of 80 years and over registered the highest use of IT gadgets to send or receive emails. The use of IT gadgets to watch movies and TV shows, listen to music, and read e-books, magazines, and online news was highest amongst those aged 70–79.

Respondents were also asked who assists them in using IT gadgets. The top three persons who help OPs are their daughter (32%), son (22%), and grandchild (16%). The assistance provided by a son or daughter declines with the OP's age, whereas the assistance of a grandchild or daughter-in-law increases with the OP's age. A third of OPs (30%) are not assisted with the use of their IT gadgets, more so amongst males than females.

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	3.3	8.0	***	7.8	3.9	1.3	**	6.1
N	2,411	3,574		3,760	1,552	673		5,985
Mean number of hours of internet access per day	3.23	1.78	n.s.	1.83	3.42	1.86	n.s.	2.10
N	77	279		288	59	8		356
% with social networking account	73.1	95.3	***	92.4	82.7	75.2	n.s.	90.4
N	80	284		295	60	8		363
Type of social networking account								
Facebook	96.6	100.0	**	99.6	98.2	100.0	n.s.	99.4
Instagram	5.6	0.7	*	1.9	0.0	0.0	n.s.	1.5
Youtube	40.9	14.6	*	13.5	48.7	33.2	n.s.	19.3
Twitter	2.0	0.2	*	0.4	0.8	0.0	n.s.	0.5
Whatsapp	0.0	0.5	n.s.	0.5	0.3	0.0	n.s.	0.4
Others (messenger, skype, vibes, etc.)	5.7	17.3	n.s.	14.9	19.2	0.0	n.s.	15.3

Information Technology	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
N	58	271		273	50	6		329
% who owns a cellphone	27.0	32.9	n.s.	39.3	19.6	6.3	***	30.5
N	2,412	3,573		3,760	1,552	673		5,985
Mean number of hours of cellphone use per day	1.44	0.76	n.s.	1.07	0.77	0.34	n.s.	1.00
N	648	1,153		1,462	297	41		1,801
% who owns a tablet	0.8	4.8	***	3.8	2.8	0.6	n.s.	3.2
N	2,411	3,574		3,760	1,552	673		5,985
Mean number of hours of tablet use per day	1.95	3.00	n.s.	3.20	1.94	2.27	n.s.	2.89
N	19	172		143	44	4		191
% who owns a laptop	0.3	1.7	*	1.8	0.1	0.1	***	1.2
N	2,411	3,574		3,761	1,552	673		5,985
Mean number of hours of laptop use per day	0.15	0.14	n.s.	0.10	1.64	-	n.s.	0.14
N	8	61		68	2	0		69
Use of gadgets								
Calling friends and family	95.4	93.8	n.s.	96.1	87.8	84.1	***	94.4
Sending or receiving emails	11.4	20.8	*	18.8	9.9	22.5	n.s.	17.5
Chat site messaging	14.5	26.9	**	22.9	20.8	18.8	n.s.	22.5
Voice or video call using the internet	8.4	22.9	***	18.0	17.5	12.4	n.s.	17.8
Playing video or computer games	7.9	11.9	n.s.	11.9	4.4	4.9	**	10.5
Watching movies and TV shows, and listening to music	9.8	19.2	n.s.	15.1	21.1	3.7	n.s.	15.8
Read ebooks, magazines and online news	2.1	9.4	**	6.3	10.1	0.9	n.s.	6.8
Internet banking	0.6	0.2	*	0.4	0.2	0.0	n.s.	0.3
Others	7.5	6.0	n.s.	6.7	5.5	6.5	n.s.	6.5
N	659	1,185		1,487	311	46		1,844
Persons who help OP with the use of these gadgets								
None	35.0	26.4	n.s.	29.1	31.9	24.5	n.s.	29.5
Spouse	9.0	3.1	*	5.8	2.5	3.6	n.s.	5.2
Son	24.1	21.1	n.s.	23.9	16.0	8.0	***	22.2
Daughter	29.4	33.3	n.s.	35.0	20.4	10.7	**	31.9
Son-in-law	0.1	0.2	n.s.	0.2	0.2	0.2	n.s.	0.2
Daughter-in-law	0.7	1.6	n.s.	0.7	3.7	4.1	***	1.3
Grandchild	9.7	18.8	*	11.7	29.2	49.7	***	15.6
Brother	0.0	0.1	n.s.	0.0	0.0	0.0	n.s.	0.0
Sister	0.1	0.7	n.s.	0.5	0.5	0.0	n.s.	0.5
Other relatives	5.8	4.5	n.s.	5.6	2.0	2.6	**	4.9
Friends	1.7	4.9	n.s.	2.9	8.0	3.5	n.s.	3.8
Others (neighbor, house help, etc.)	0.4	0.2	n.s.	0.2	0.5	0.9	n.s.	0.3
N	658	1,185		1,487	311	46		1,844

*p < 0.05. **p < 0.01. ***p < 0.001. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Summary, Conclusions, and Recommendations

The daily activities of older Filipinos reveal a combination of a sedentary, physical, and nurturing lifestyle. As more than 70% of Philippine households have TVs (Philippine Statistics Authority, 2018), it is reasonable to find that 66% of OPs watch TV every day. This is a welcome finding as it is 5 percentage points lower than that observed by Cruz et al. (2016) in the 2007 Philippine Study on Aging (PSOA). However, there are no additional data on how many hours OPs actually spend on this activity, with whom they watch TV, and what programmes they regularly view; such data could help shed light on the contribution of TV viewing to the overall quality of life of the OPs.

More than half of the OPs in the LSAHP reported performing daily physical exercises; this is about a 10-percentage-point drop compared with the 2007 PSOA findings. This large decline is a cause for concern because physical exercises stimulate the metabolic system to ensure good health in view of the general decline in their physiological make-up as OPs age. Information on the types of exercise that the OPs are engaged in is also important in identifying supplementary physical exercise programmes for them.

The proportion of OPs engaged in gardening daily increased slightly from 26% in the 2007 PSOA to 27% in the LSAHP. Gardening may be viewed as a manifestation of the OPs' nurturing character. Another nurturing activity that may be included in future studies on OPs is taking care of grandchildren. This has been documented as important in many migration studies that focus on children left behind by overseas Filipino workers.

Humans are social beings but, at older ages, many OPs engage less frequently in socialisation as a daily activity. Nevertheless, the LSAHP data reveal that 35% of OPs attend social activities at least once a month. This is 15 percentage points higher than the figure reported in the 2007 PSOA and is thus a welcome finding. However, as expected, attendance in social activities declines with age. Local government units (LGUs) and/or the office of senior citizens affairs are encouraged to diversify their activities to ensure the participation of all OPs in their respective areas. Recommended activities for OPs at the LGU level include social dancing, Zumba, tree planting, walking and/or jogging as a group, games/competitions, visiting sick members, tours, and movie showings.

The LSAHP validated the importance of religion in the lives of older Filipinos, as three in four OPs claimed that religion is very important in their lives. Compared with the 2007 PSOA results, however, the LSAHP results indicate lower 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 a little more than 1 in 10 OPs are currently members of any religious group or organisation, with females and those aged 60–69 reporting higher membership than their respective counterparts. Further research could clarify the linkage between individuals' religious values/beliefs and the actions they take to support such values.

Loneliness is often linked to social isolation, but the literature reveals no direct link between them. This is perhaps due to the many factors associated with both isolation and loneliness, such as retirement, migration, and poor health and/or loss of mobility, which in turn lead to social network disruption (Wenger et al., 1996).

LSAHP data reveal that the reduced level of socialisation does not necessarily translate into a high prevalence of loneliness amongst older Filipinos; this is consistent with the findings of Cornwell and Waite (2009). Only a small proportion of OPs feel a lack of companionship, feel left out, or feel isolated from others. This may be partly explained by familial expectations that influence living arrangements for OPs. While care establishments for OPs have started to increase in the Philippines, tradition dictates that the family should take care of the OP and the OP should live with one or more children. This has been institutionalised with the inclusion of parents of taxpayers as bona fide dependents living with them for additional tax exemptions. Therefore, OPs generally have access to family members for companionship and potential assistance when needed and do not feel left out to fend for themselves. However, the recent tax reform in the Philippines based on gross income has eroded such tax incentive for care and support for older people. How this change in the tax regime would affect the tradition of family support for OPs would remain to be seen in the coming years.

Consistent with the low level of loneliness amongst OPs, perceived social isolation from friends and relatives not residing with the OPs is also low. Nevertheless, social isolation from friends and relatives not residing with the OPs as measured by the LSNS-6 is not as low. Such disconnect needs further attention, especially as to how social isolation is linked to health risks such as depression and other mental health problems, in particular, and quality of life of OPs, in general. Early detection of

social isolation tendencies of OPs may be addressed by including the LSNS-6 in the practice protocol of gerontological practitioners in the Philippines in concert with the suggestion of Lubben et al. (2006) so they can receive in-depth assessment and targeted interventions. Although a third of older Filipinos are found to have weak social ties, the quality of these relationships does not appear to be alarming, with 9 in 10 OPs who positively assessed the level of contact with their non-co-resident relatives and friends. Moreover, 94% said they are currently very or somewhat satisfied with their lives. The different ways in which older Filipinos assess various aspects of their lives is something to be investigated in further analyses of the LSAHP data.

In the current digital era, social networks have expanded to include virtual connections to supplement face-to-face interactions. A notably small proportion (6%) of OPs in the LSAHP have access to the Internet, and nearly all of those with Internet access have Facebook accounts. Those with Internet access spend an average of 2 hours daily on the Internet. The cell phone is the most commonly used IT gadget by OPs while tablets and laptops are rarely used. OPs mainly use IT gadgets to connect with family and friends through the assistance of their sons, daughters, or grandchildren, amongst others. We recommend that LGUs include training programmes that would introduce OPs to the benefits of Internet connectivity, as well as workshops to assist OPs in the use of IT gadgets to expand their social networks beyond their residential communities. Further research could explore how social networking using the Internet as a daily activity is related to OPs' loneliness, social isolation, and quality of life.

References

- Baird, B.M., R.E. Lucas, and M.B. Donnellan (2010), 'Life Satisfaction Across the Lifespan: Findings from the Two Nationally Representative Panel Studies', *Social Indicators Research*, 99(2), pp.183–203. <https://doi.org/10.1007/s11205-010-9584-9> (accessed 11 July 2019).
- 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.1361–1382. doi:10.1002/gps.2574 (accessed 08 May 2019).
- Chen, C. (2001), 'Aging and Life Satisfaction', *Social Indicators Research*, 54(1), pp.57–9. <https://doi.org/10.1023/A:1007260728792> (accessed 12 July 2019).

- 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. doi:10.1177/002214650905000103 (accessed 25 October 2019).
- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito (2007), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- 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., E. Blozik, G. Gillmann, S. Iliffe, W. von Renteln Kruse, J.C. Beck, and A.E. Stuck (2006), 'Performance of an Abbreviated Version of the Lubben Social Network Scale among Three European Community-Dwelling Older Adult Populations', *The Gerontologist*, 46(4), pp.503–13. <https://doi.org/10.1093/geront/46.4.503> (accessed 10 September 2019).
- Lubben, J.E. and M. Gironde (2004), 'Measuring Social Networks and Assessing their Benefits', in C. Philipson, G. Allan, and D. Morgan (eds.), *Social Networks and Social Exclusion: Sociological and Policy Perspectives*. Aldershot: Ashgate Publishing Ltd., pp.20–34.
- Philippine Statistics Authority (2018). Philippines in Figures 2018. Retrieved from <https://psa.gov.ph/sites/default/files/PIF%202018.pdf>.
- Pullum, E., and R.C. Akyil (2017), 'Loneliness and Social Isolation among Elderly People', *Meandros Medical and Dental Journal*, 18, pp.158–63.
- Stephens, 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. doi:10.1073/pnas.1219686110 (accessed 25 July 2019).
- Takagi, E., Y. Saito, and A. Chan (forthcoming), 'Gender Differences in Social Relationships and Loneliness among Older Adults in Singapore', *Journal of Population Research*.
- Valdez, P., J.L. Angeles, E. Pareja-Corpuz, and C. Hernandez (2013), 'Perceptions towards Aging among Selected Filipino Adults', *International Journal of Research Studies in Psychology*, 2(3), pp.89–96. doi:10.5861/ijrsp.2013.458 (accessed 25 July 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(3), pp.333–58.

Services for the Older Persons

Mark Ryan B. Paguirigan

The care for older Filipinos is guaranteed by the fundamental law of the land. The 1987 Philippine Constitution ensures the promotion and protection of the rights and welfare of Filipino senior citizens as a minority population sector. Laws and programmes focusing on services for older Filipinos have developed incrementally over the past 40 years, although much remains to be done to ensure their full implementation (Chalkasra, 2014; Commission on Human Rights, 2019; Salenga et al. 2016).

As an integral part of society, older Filipinos are entitled to certain benefits and privileges through the enactment of Republic Act No. (RA) 9994 or the Expanded Senior Citizens Act of 2010, as explained in Chapter 1 of this report. Aside from entitlements – such as the 20% discount on medicine purchases, transportation, hotels, restaurants, recreational facilities, places of leisure, and funeral services, as well as individual income tax exemption – the law also covers the right to long-term and palliative care; the right to education, training, lifelong learning, capacity building; and the right to social security and social protection (Commission on Human Rights, 2019).

Related to the privileges accorded to older Filipinos is the provision for institutional forms of living arrangement. Such facilities are not well developed in the Philippines, hence, the concept of the ‘home for the aged’, as commonly used in Western countries, is rarely used in the country (Chalkasra, 2014). A few geriatric care homes cater to older people.

Statistics from the Department of Social Welfare and Development (2019) show that of around 33 homes for the aged, 4 are government-owned facilities, and 29 are accredited non-governmental organisations or private social welfare agencies including Church-led home-care institutions. In addition, the Department of Social Welfare and Development (DSWD) also manages a temporary shelter for the stranded, vagrants, and mendicants located in Metro Manila, and a processing centre in Zamboanga City for Filipino deportees/repatriates from neighbouring countries in Zamboanga City, who may include 60 years and over (Cleofe, 2019).

Despite the disproportionate ratio of homes for the aged to the number of older Filipinos, this is not yet seen as a major problem in the country since the family continues to be the primary provider of support for its members in all stages of the life cycle. Moreover, a stigma is attached to the institutionalisation of OPs in home-care facilities as intergenerational family solidarity remains strong and co-residence with family members is still the most common living arrangement for many older Filipinos. Accordingly, the dependency-co-residence paradigm holds true and is based on the widespread expectation that the OPs will be taken care of by their children. The Filipino conception of this is the debt of gratitude or *utang na loob*.

While the family continues to be the main provider of care for OPs, changes in social and cultural norms pose different challenges to the traditional Filipino family structure and have gradually weakened the traditional old-age support mechanism that OPs need. These challenges have been amplified by the rise in the number of OPs who suffer from chronic diseases, functional limitations, and severe disabilities. This begs the question of how older Filipinos perceive the idea of homes for the aged. Thus, in the 2018 LSAHP, OP respondents who passed the brief cognitive screening instrument were asked the following questions: Do Filipino 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?

This chapter provides an initial analysis of the LSAHP baseline data on older Filipinos' awareness and use of services for OPs, as well as their attitudes towards homes for the aged, by sex and age. Other services such as health care services and free vaccination against certain diseases are discussed in previous chapters of this report.

Government Privileges for OPs

Past surveys on older Filipinos showed an increasing proportion of OPs who are aware of the government's programme that provides privileges to their sector; from 56% in the 1996 Philippine Elderly Survey, the proportion increased significantly to 89% in the 2007 Philippine Study on Aging (PSOA). The 2018 Longitudinal Study of Aging and Health in the Philippines (LSAHP) indicates that the proportion who are aware of the different privileges provided for them by the government slightly increased to 92%, with a slim difference between older males and females aware of such privileges (91% vs 92%) (Table 10.1).

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 over	90.5	92.2	n.s.	91.1	94.1	87.5	***	91.5
<i>N</i>	2,411	3,574		3,760	1,551	673		5,985
% with a senior citizen ID card	95.8	98.4	***	96.4	98.6	99.5	***	97.4
<i>N</i>	2,182	3,293		3,426	1,460	589		5,475
% who have availed of the following privileges:								
20% discount on purchase of medicine	64.0	69.4	n.s.	61.7	77.5	73.3	***	67.3
20% discount from all establishments for transportation services, hotels and similar lodging establishment, restaurants and recreation centers	75.1	78.9	n.s.	76.4	82.7	70.0	***	77.4
20% discount on admission fees charged by theaters, cinema houses, concert halls, circuses, carnivals and other similar places of culture, leisure, and amusement	10.4	14.2	***	13.0	13.2	9.6	n.s.	12.7
Exemption from the payment of individual income taxes	5.8	6.1	n.s.	6.1	5.4	6.5	n.s.	6.0
Exemption from training fees for socio-economic programs undertaken by the Office for Senior Citizens Affairs	11.7	8.8	n.s.	9.6	10.7	9.4	n.s.	9.9
Free medical and dental services in government health facilities anywhere in the country	48.3	49.6	n.s.	46.7	53.7	51.0	n.s.	49.1
<i>N</i>	2,089	3,241		3,305	1,440	586		5,331

Awareness and Use of Services	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% of older person who are recipient of the ₱500 monthly social pension given by DSWD	46.5	47.0	n.s.	39.2	56.4	67.3	***	46.8
<i>N</i>	2,411	3,574		3,760	1,552	673		5,985

***p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

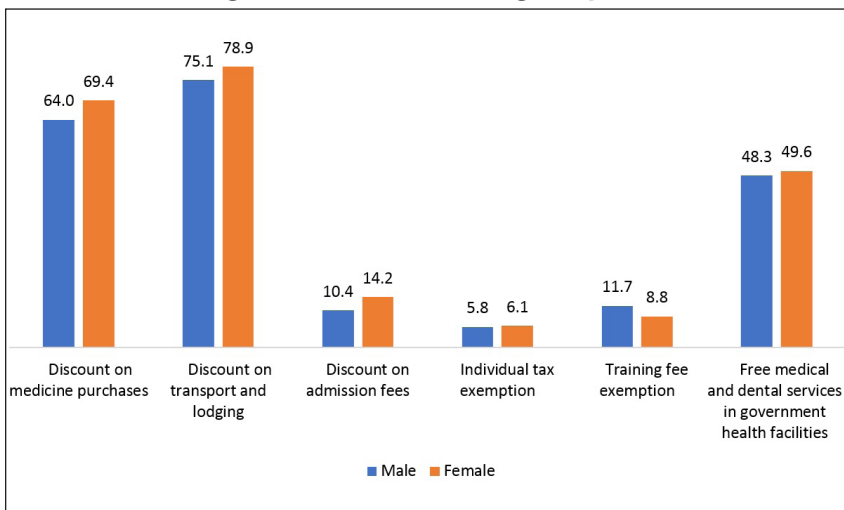
While there is no clear pattern in terms of age, as expected, more OPs belonging to the younger cohorts are aware of these privileges relative to their older counterparts (70–79 and 80+).

More female older people have a senior citizen ID card, which OPs need to avail themselves of the privileges. The proportion of OPs who registered for a senior citizen ID card significantly rose from 6 in 10 in 2007 to more than 9 in 10 in 2018. More females than males are reportedly being listed as senior citizens in their respective barangays, the proportion of which increases as OPs advance in age.

Questions pertaining to the privileges accorded to OPs were of multiple responses. Amongst the list of privileges, OPs most commonly avail discounts on transportation, restaurants, and recreational services, followed by discounts on the purchase of medicines and the free medical and dental services in government health facilities. The least commonly used privileges are income tax exemption, exemptions from training fees for socioeconomic programmes undertaken by the office for senior citizens affairs, and discounts on admission fees charged by theatres, cinemas, and the like. However, discounts on admission fees are given only by some well-to-do local government units (LGUs). For instance, senior citizens in Makati City continue to enjoy benefits and privileges that other LGUs are yet to replicate (The Manila Times, 2015), some of which are beyond what the national law requires. Makati OPs with a BLU card receive age-bracket-based cash gifts twice a year, burial assistance, free birthday and golden wedding anniversary cakes, free Christmas groceries, unlimited free movies in any cinema in the city, exemption from vehicle colour coding, free tours to provincial tourist spots, and a one-time 100,000 peso (₱) cash gift to centenarians on top of the mandatory ₱100,000 gift. Other LGUs in Metro Manila, Cebu, and Davao City also provide notable privileges to their senior citizen residents.

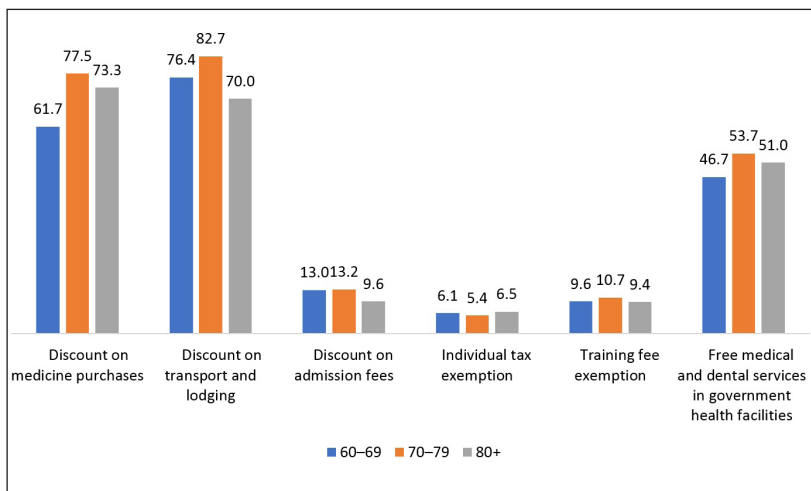
There are gender differences in the use of privileges. Figure 10.1 shows that amongst those who have a senior citizen ID card, the proportion of females who used the senior citizen privileges is consistently higher than that of males, particularly the discounts on the purchase of medicines; the discounts for transportation services, hotels, and similar lodging establishments, restaurants, and recreation centres; the discounts on admission fees charged by places of culture, leisure, and amusement; exemption from the payment of individual income taxes; and free medical and dental services in government health facilities anywhere in the country.

Figure 10.1. Use of Privileges, by Sex



Source: Calculated by DRDF using original LSAHP data.

Figure 10.2. Use of Privileges, by Age



Source: Calculated by DRDF using original LSAHP data.

While there is no clear age gradient for most of the services used, a higher proportion of those aged 80 and above, compared to those in their 60s, took advantage of the 20% discount on medicines and the free medical and dental services in government health facilities. Figure 10.2 shows the use of different privileges by age group.

Generally, the proportion of OPs who availed themselves of the privileges substantially increased from 2007, except for the proportion who availed themselves of the income tax exemption.

The 2018 LSAHP also asked about the proportion of indigent OPs who receive the ₱500 monthly social pension. Per RA 9994, indigent OPs are those who are identified as frail, sickly, or disabled; those who do not receive any pension from other government agencies; and those who do not have a permanent source of income or of financial assistance or compensation to support their basic needs. As of the second quarter of 2018, close to 3 million indigent OPs received the monthly social pension (DSWD, 2018). On the other hand, results from the LSAHP indicate that nearly half (47%) of OPs are recipients of the monthly social pension, with significantly more recipients amongst the oldest cohort (67% compared to 39% of OP belonging to 60–69 and 56% of those belonging to 70–79). However, there is no significant difference amongst females and males in receiving the social pension.

Attitudes towards Homes for the Aged

Table 10.2 summarises the distribution of OP respondents' attitudes towards homes for the aged. About 8 in 10 OPs think it is a good idea to have homes for the aged. Amongst those who think it is a good idea to have these homes, the majority think such facilities are beneficial for those who have no one to take care of them. Other reasons cited are the OP's health would be better taken care of in such a facility and would have a better chance to socialise with people of his/her age.

The 15% of OPs who think it is not a good idea to have homes for the aged cited the following reasons: that the family should take care of the OP (68%), that the OP will miss his/her family, that the OP would not want to live with strangers (28%), and that placing the OP in a nursing home is shameful for the family (19%). Interestingly, a higher proportion of males said that being in a nursing home would bring shame to the family.

**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	84.4	79.4		81.6	81.7	78.8		81.4
No	12.2	16.0	n.s.	13.2	16.1	20.0	***	14.5
Depends	3.5	4.6		5.3	2.2	1.1		4.2
<i>N</i>	2,196	3,259		3,615	1,400	439		5,454
Among those who think it's a good idea to have Homes for Aged								
Spare the family from burden of caring for the older person	32.0	32.2	n.s.	32.2	32.5	30.1	n.s.	32.1
Health will be better taken care of	36.4	34.5	n.s.	36.6	31.7	35.4	n.s.	35.3
Better chance to socialize with people of same age	10.2	10.8	n.s.	9.0	12.8	16.5	***	10.5
Beneficial for those who have no one to care for them	73.4	79.0	n.s.	77.6	74.7	75.2	n.s.	76.7
Others (better facilities, life is easier, etc.)	3.1	3.9	n.s.	2.9	4.8	4.9	n.s.	3.6
<i>N</i>	1,852	2,587		2,950	1,144	345		4,439
Among those who think it is not a good idea to have Homes for the Aged								
The family should take care of the older person	59.5	72.3	n.s.	68.0	69.8	62.7	n.s.	67.9
Older person will miss family	39.0	31.0	n.s.	35.0	35.0	23.2	n.s.	33.7
Older person will not want to live with strangers	37.4	22.5	n.s.	26.5	28.3	30.8	n.s.	27.5
Expensive	10.3	8.8	n.s.	9.4	9.8	8.0	n.s.	9.4
Shameful for the family	34.1	11.4	***	22.4	12.6	18.0	n.s.	19.1
Others (feels like in prison, will be sickly there, etc.)	5.1	6.6	n.s.	7.3	2.8	7.8	n.s.	6.1
<i>N</i>	267	522		476	225	88		789
Among those who said it depends whether Homes for the Aged is a good idea								
If older person is abandoned	51.8	36.7	n.s.	40.2	54.3	26.6	n.s.	41.8
If children do not want to care of their elderly parents	11.8	34.2	n.s.	24.8	38.3	26.2	n.s.	26.6
If children do not treat their elderly parents well	8.1	15.5	n.s.	12.5	17.7	2.2	n.s.	13.0
If older person has no children or grandchildren	11.8	31.2	n.s.	24.9	21.3	37.1	n.s.	24.7
If the conditions and treatment in the Home for the Aged is good	36.6	30.6	n.s.	36.5	11.0	20.8	**	32.6
Others (not sure what is there, if it becomes a law, etc.)	4.4	0.7	n.s.	0.9	8.7	1.0	**	2.0
<i>N</i>	76	150		190	31	5		226

Attitudes	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Desire to live in a Home for the aged if near the current residence								
Yes	17.6	16.6	n.s.	17.6	16.7	12.6	n.s.	17.0
No	75.1	75.7		74.8	74.9	83.0		75.5
It depends	7.3	7.7		7.6	8.4	4.4		7.5
<i>N</i>	2,185	3,238		3,597	1,389	436		5,422
If desire to live in a Home for the Aged is conditional, it depends on the ff:								
If older person is abandoned	24.1	27.8	n.s.	25.8	25.9	36.4	n.s.	26.3
If children do not want to care of their elderly parents	28.5	52.5	*	35.2	61.3	45.1	*	43.1
If children do not treat their elderly parents well	21.5	12.3	n.s.	16.4	14.9	14.4	n.s.	15.9
If older person has no children or grandchildren	10.3	6.8	n.s.	6.5	11.6	10.7	n.s.	8.2
If the conditions and treatment in the Home for the Aged is good	13.1	16.4	n.s.	18.7	5.2	24.2	n.s.	15.1
Others (if near home, if older person is no longer comfortable living with family, etc.)	14.0	4.8	n.s.	9.6	4.1	17.6	n.s.	8.4
<i>N</i>	159	249		273	117	19		409
Older persons who want to live in a Home for the Aged now if it is near their current residence								
Yes	42.5	40.5	n.s.	42.9	35.1	52.0	n.s.	41.4
No	45.4	45.7		43.9	52.5	33.1		45.6
It depends	12.1	13.8		13.2	12.4	14.9		13.1
<i>N</i>	539	796		909	350	75		1,334
If desire to live in a Home for the Aged now is conditional, it depends on the ff:								
If older person is weak and sickly	3.0	8.3	n.s.	6.5	6.4	03.6	n.s.	6.3
If older person has no place to live/abandoned	12.6	18.4	n.s.	7.6	36.3	30.8	**	16.2
If children do not want to care of their elderly parents/if older person becomes a burden	53.1	31.6	n.s.	41.2	41.8	13.7	n.s.	39.6
If children do not treat their elderly parents well	11.2	21.6	n.s.	9.9	39.7	16.2	**	17.7
If older person has no children or grandchildren	6.9	7.9	n.s.	7.6	8.6	3.4	n.s.	7.5
If the conditions and treatment in the Home for the Aged is good	18.7	30.1	n.s.	32.0	10.5	20.0	n.s.	25.9
If children will allow	7.5	35.4	*	31.9	10.6	8.1	n.s.	25.0
Others (if no one cares, if many older persons will also live there, etc.)	4.4	1.9	n.s.	1.2	3.2	18.8	**	2.8
<i>N</i>	65	110		120	43	11		174

*p < 0.05, **p < 0.01, ***p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Four percent of OPs said that whether having homes for the aged is a good idea depends on grounds such as if the OP is abandoned (42%), if children do not want to take care of their old parents (27%), if the OP has no children or grandchildren (25%), and if the conditions and treatment in the home for the aged are good (33%).

Even though most OPs think having homes for the aged is a good idea, more than three quarters do not want to live in a care facility. Those who desire to live in a home for the aged cited the following conditions: if children do not want to take care of their OP parents (43%), if the OP is abandoned (26%), if children do not treat their old parents well (16%), if the conditions and treatment in the home for the aged are good (15%), and if the OP is no longer comfortable living with family (8%).

When asked whether OPs would want to live in a home for the aged now if it were near their current residence, only two in five said yes. Those who said their desire to reside in such a facility was conditional cited the following reasons: if children do not want to take care of their elderly parents or if the OP becomes a burden (40%), if the conditions and treatment in the home for the aged is good (26%), and if children will allow them to live in such a facility (25%).

Summary, Conclusions, and Recommendations

The study demonstrates a high level of awareness amongst older Filipinos about the government programmes that provide privileges to senior citizens. However, awareness of these privileges does not automatically translate to the use of services. Benefits and privileges most used by OPs are those that they readily and deliberately need such as the discounts on medicine and transportation and lodging, as well as free medical and dental services. The percentage with a senior citizen ID card was highest amongst older women and those belonging to the oldest age cohort. Under RA 9994 and RA 10645, the ID card entitles the owner to benefits, privileges, and government assistance. From 2007 to 2018, the proportion of OPs who registered for an ID card notably rose.

Assessment studies of RA 9994 at the national and institutional levels have demonstrated that the law and its implementation leave much to be desired (Chalkasra, 2014; Salenga et al., 2016). The law intends to provide older Filipinos socioeconomic and health assistance through discounts on basic necessities. However, viability and feasibility issues pervade some of the law's provisions, on top

of the capability limitations of LGUs to execute the law (Chalkasra, 2014). Generally, the provisions of the law only benefit OPs who have the purchasing power to avail themselves of certain privileges; they leave out the neediest OPs who cannot afford privileges such as the purchase of medicine. Clearly, privileges based on discounts or those that require financial capability are advantageous only to the richer and more educated OPs (Cruz and Laguna, 2010; Natividad, 2000).

While the ₱ 500 (about US\$10) social pension provided to indigent OPs has somehow eased the poverty gap amongst vulnerable older Filipinos, still, this is inadequate to meet the current market prices of even the basic commodities (Javier et al. 2019). In addition, a large proportion of poor OPs fail to meet the strict eligibility criteria for the current social pension (Knox-Vydmanov et al., 2017).

The findings also reveal a greater predisposition towards institutional living, particularly amongst the older males and those in the younger cohort (60–69). Most think that living in a home for the aged is beneficial for OPs who do not have anyone to care for them and that the OP's health would be better taken care of under such a setup. The minority who do not approve of this living arrangement believes that family members should take care of OPs and that OPs will miss their family if they live with strangers. There are also those who perceive this practice as shameful, implying that the value of *utang na loob* remains strong amongst older Filipinos. These social and cultural norms and the expected rise in illnesses requiring long-term care accompanying the trend towards further extensions in life expectancy suggest the need for more government support, particularly in promoting long-term care and institutional forms of living arrangement for OPs.

In sum, while the Philippine government has put in place social protection policies and programmes intended to secure the well-being of older Filipinos, greater effort must be exerted to cater to the needs of the poor and vulnerable OPs.

References

- Chalkasra, L.S.P.S. (2014), *An Assessment of the Implementation of Republic Act No. 9994: 'The Expanded Senior Citizens Act of 2010' in Makati City*. Manila, Philippines: Yuchengco Center.
- Cleofe, T.S. (2019), Personal communication, 3 July.
- Commission on Human Rights (2019), Inputs of the Commission on Human Rights of the Philippines to the 10th Session of the United Nations Open-Ended Working Group on Ageing (OEWGA). Retrieved from https://social.un.org/ageing-working-group/documents/tenth/Inputs%20NHRIs/Philippines_CHRP-Written-Submission_OEWGA10_final.docx.
- Cruz, G.T. and E.P. Laguna (2010), 'Overseas Labor Migration and Well-being of Older Filipinos', in E.N. Arifin and E. Ananta (eds.), *Older Persons in Southeast Asia: An Emerging Asset*. Singapore: Institute of Southeast Asian Studies, pp.314-34.
- Department of Social Welfare and Development (DSWD) (2018), Indigent Older Persons Receive P500 Monthly Pension, not P6,000 – DSWD, 25 July Retrieved from <https://www.dswd.gov.ph/indigent-older-persons-receive-p500-monthly-pension-not-p6000-dswd/>.
- Department of Social Welfare and Development (2019), Statistics of NGO/Private Social Welfare Development Agencies (SWDAs) Providing Programs and Services to Older Persons with Registration and Licensed to Operate and/or Accreditation issued by DSWD as of July 9, 2019 (Residential-Care). Quezon City: DSWD Central Office.
- Javier, R.E., M.I. Conchada, and M. Jabar (2019), 'Anticipating Aging and Prospecting Pension for Retirement Well-Being', *DLSU Business & Economics Review*, 28(2), 183-98.
- Knox-Vydmannov, C., D. Horn, and A. Sevilla (2017), *The Feasibility of a Universal Social Pension in the Philippines*. Quezon City, Philippines: Coalition of Services of the Elderly and HelpAge International.
- Manila Times, The (2015), 'Makati Elderly Get Royal Perks', 11 March. Retrieved from <https://www.manilatimes.net/makati-elderly-get-royal-perks/168526/>.
- Natividad, J.N. (2000). 'Ageing in the Philippines: An overview', in D.R. Phillips (ed.), *Ageing in the Asia-Pacific Region: Issues, Policies, and Future Trends*. London, England: Routledge, pp.267-83.
- Salenga, R.L., M.M. Loquias, and J.N. Sarol (2016), Effect of the Expanded Senior Citizens Act of 2010 (Republic Act 9994) on Drug Accessibility among the Elderly. *Acta Medica Filipina*, 50(2), pp.38-43.

Family Support and Intergenerational Exchanges

Maria Paz N. Marquez

Belying the popular characterisation of older persons (OPs) as passive recipients of support from their children, studies have consistently shown that Filipino older parents are also active providers of support not just to their children but also to their grandchildren (Biddlecom et al., 2002; Cruz et al., 2016; Domingo, 1995; Domingo et al., 1994; Natividad and Cruz, 1997). These mutual economic, social, and emotional exchanges of support are manifested in co-residence with kin, mainly either with one's spouse and/or children, which is the predominant living arrangement amongst older Filipinos (Chapter 5 of this report; Cruz et al., 2016; Natividad and Cruz, 1997). However, based on the 2007 Philippine Study on Aging (PSOA) data, even with non-co-resident children, older parents continue to maintain ties of support and interdependence (Abalos et al., 2018; Cruz et al., 2016).

Do these patterns still persist, or have they changed in recent years? This chapter will assess the current extent of support transfers between older parents and their co-resident and non-co-resident children using the latest available data from the Longitudinal Study of Aging and Health in the Philippines (LSAHP). This chapter will also examine attitudes towards family support, specifically OPs' expectation of, and satisfaction with, financial support from their children.

The LSAHP questionnaire provided an elaborate matrix containing child-specific information on the exchanges of support and social contact between the OPs and their co-resident and non-co-resident children in the 12 months before the conduct of the survey. The survey asked for information on four types of assistance: (i) financial support; (ii) material support (e.g. food, clothes, and medicines); (iii)

instrumental support (e.g. bathing and going to the toilet); and (iv) 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. This chapter, however, will examine only whether such contact and communication transpired.

Social Contact

Table 11.1 presents the patterns of social contact between OPs and their non-co-resident children. Nearly 6 of 10 (58%) OPs visited any of their non-co-resident children in the 12 months before the survey while a higher percentage (74%) of OPs were visited by a non-co-resident child. About 3 in 10 (29%) OPs contacted their non-co-resident offspring through letters, telephone calls, or text messages in the past year while 43% received such communication from their children.

There is no significant gender disparity in the social exchanges between OPs and their non-co-resident children. By age category, only the exchange of communication yielded statistically significant results. One-third (33%) of OPs in their 60s wrote, texted, or called their children, which is higher than the proportions of the 70–79 and 80+ age groups (26% and 16%, respectively). The same downward pattern by age group is evident in the level who received communication from their children. OPs in the youngest age group 60–69 registered the highest percentage (48%) who received letters, calls, or text messages from their children compared to their older counterparts (37% amongst OPs in their 70s and 32% amongst those 80+ years old).

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	58.7	58.1	n.s.	59.6	58.7	50.9	n.s.	58.3
% who wrote, called or texted at least one child	28.6	29.5	n.s.	32.9	26.3	15.6	***	29.2
% who was visited by at least one child	74.9	73.9	n.s.	74.2	75.0	73.1	n.s.	74.3
% who received letters, calls, or text messages from at least once child	43.5	43.1	n.s.	47.9	37.3	31.7	***	43.2
N	2,136	3,152		3,283	1,403	603		5,289

*** p < 0.001, n.s. = not significant

Source: Calculated by DRDF using original LSAHP data.

Provision of Assistance

In addition to social contact, older parents also exchange various types of support with their children. Nearly half (47%) of the OPs provided financial assistance, while 52% gave material support to any of their co-resident children (Table 11.2). Very few OPs (3%) provided instrumental support to children living with them, which is not surprising given the expected healthier condition of the children compared to the aging respondents. In contrast, a high proportion (88%) of OPs extended emotional support.

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	
<i>To any coresident child</i>								
% who gave financial support	51.3	43.6	n.s.	52.8	38.5	25.4	***	46.9
% who gave material support	53.5	51.3	n.s.	60.9	40.9	19.2	***	52.2
% who gave instrumental support	3.3	2.8	n.s.	3.1	3.0	2.3	n.s.	3.0
% who gave emotional support	88.5	88.4	n.s.	91.3	86.3	73.8	***	88.4
<i>N</i>	1,530	2,066		2,438	791	368		3,596
<i>To any noncoresident child</i>								
% who gave financial support	26.4	22.9	n.s.	29.7	18.2	9.4	***	24.4
% who gave material support	21.1	20.8	n.s.	26.9	14.3	3.8	***	20.9
% who gave instrumental support	0.5	1.6	n.s.	1.5	0.6	0.5	n.s.	1.1
% who gave emotional support	77.6	78.1	n.s.	83.2	73.1	60.0	***	77.9
<i>N</i>	2,137	3,152		3,282	1,402	603		5,289

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

Source: Calculated by DRDF using original LSAHP data.

On support given to co-resident and non-co-resident children, fewer OPs extended any type of support to their non-co-resident children compared to their co-resident children, probably due to the physical proximity of the latter to the OPs. For instance, while about half (47%) of OPs financially helped their co-resident children, less than a quarter (24%) did so to their non-co-resident children.

Generally, more fathers than mothers supported their co-resident children. On the other hand, slightly more mothers extended instrumental support to their non-co-resident children than fathers (2% vs 1%, respectively).

The data also show significant age variation in the provision of financial, material, and emotional support, with a consistently decreasing proportion providing support with increasing age regardless of living arrangement. For instance, the level of OPs giving monetary support to co-resident children diminishes with age, from 53% amongst the youngest age group (60–69) to 25% amongst the oldest (80 and over), signifying the greater capacity of the younger cohort of OPs to provide financial assistance. The same pattern holds true for non-co-resident children; the proportion of OPs who lent financial assistance dropped from 30% amongst those in their 60s to 9% amongst in the oldest age cohort.

Receipt of Assistance

Consistent with earlier studies, the LSAHP data show that Filipino parents are not only providers of support but are also beneficiaries of support from their children in their old age. More than 6 of 10 OPs received monetary assistance from their children in the 12 months before the survey regardless of residence (64% from co-resident children and 62% from non-co-resident children) (Table 11.3). Two-thirds (67%) of OPs received material support from their co-resident children while half (51%) received material support from their non-co-resident children.

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	
<i>From any coresident child</i>								
% who received financial support	54.8	70.0	**	59.8	71.3	71.3	***	63.5
% who received material support	55.8	75.5	**	60.2	78.7	88.1	***	67.1
% who received instrumental support	5.2	10.3	**	4.9	7.9	30.1	***	8.1
% who received emotional support	74.7	82.2	n.s.	77.6	78.2	90.0	*	79.0
<i>N</i>	1,530	2,066		2,438	791	368		3,596
<i>From any noncoresident child</i>								
% who received financial support	61.0	62.2	n.s.	60.6	63.4	64.0	n.s.	61.7
% who received material support	49.2	51.9	n.s.	50.0	51.3	53.8	n.s.	50.8
% who received instrumental support	2.2	4.2	**	2.3	3.0	10.0	***	3.4
% who received emotional support	71.8	75.0	n.s.	75.1	72.3	68.9	n.s.	73.7
<i>N</i>	2,137	3,152		3,282	1,402	603		5,289

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

Source: Calculated by DRDF using original LSAHP data.

The level of instrumental support is much lower, with 8% of OPs receiving this type of support from their co-resident children and 3% receiving it from their non-co-resident children. Amongst all types of support received by the OPs, emotional support is the most predominant.

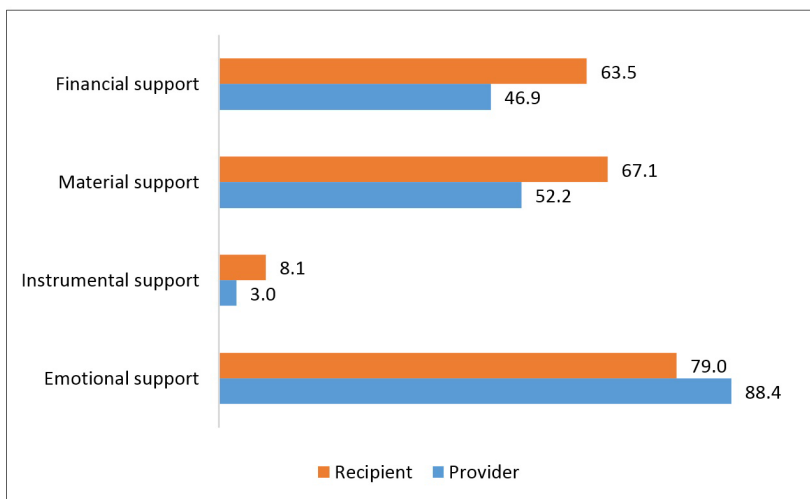
The results indicate that 79% and 74% of OPs received emotional support from their co-resident and non-co-resident children, respectively.

Similar with the pattern in the provision of support, assistance received from co-resident children is more prevalent than support from non-co-resident children.

Females consistently figure more prominently than males as recipients of all types of support from children regardless of living arrangement. For instance, significantly more mothers (70%) than fathers (55%) received monetary support from their co-resident children. A wider gender gap is seen in the receipt of material support from co-resident children – 76% of mothers against only 56% of fathers received such form of assistance.

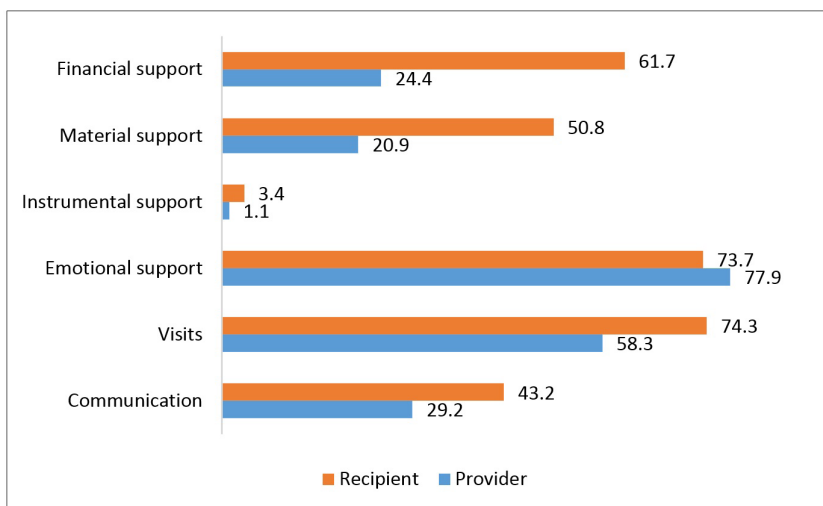
In terms of age, support from children is generally more common amongst the older cohorts compared to the younger OPs, the reverse of the pattern for the provision of support. This pattern holds true for all types of support except for emotional support coming from non-co-resident children where the highest percentage is found amongst OPs in the age group 60–69 years old.

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



Source: Calculated by DRDF using original LSAHP data.

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



Source: Calculated by DRDF using original LSAHP data.

Comparing the intergenerational flows of support, more OPs are recipients of financial, material, and instrumental support than providers of such support for both co-resident and non-co-resident children (Figures 11.1 and 11.2). In contrast, the proportion of OPs who provide emotional help exceeds the proportion who receive it. The proportion of OP-initiated social contact is also lower compared to the proportion of contact initiated by their children (Figure 11.2).

Exchange of Financial Support

A closer examination of the financial exchanges between OPs and their children reveals that 5% of OPs reported giving a large sum of money to any of their children in the past 12 months (Table 11.4). 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. There are significant but small differences in the proportion who gave a large amount to their children across age groups of the OPs. The amount given by parents ranges from ₱100 to ₱1,000,000 (data not shown; from US\$2 to US\$20,000) with a median of ₱12,000 or about US\$240.

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	5.10	5.40	n.s.	6.30	4.00	2.4	***	5.30
N	2,277	3,426		3,615	1,461	628		5,704
Median amount given to any of the children	20,000	12,000	n.s.	17,076	4,507	51,065	**	12,000
N	116	177		228	50	15		293
% who received monthly financial support from any of the children	20.90	29.00	***	24.90	27.90	25.80	n.s.	25.80
N	2,277	3,426		3,614	1,461	628		5,703
Median amount of financial support received monthly from any of the children	3,000	3,000	n.s.	3,000	3,000	2,000	*	3,000
N	475	995		901	407	162		1,470

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

Source: Calculated by DRDF using original LSAHP data.

Conversely, a quarter (26%) of OPs received monthly financial assistance from their children; mothers appear to be more financially dependent on their children compared to fathers (29% vs 21%, respectively). The monthly amount received by the OPs ranges from ₱50 to ₱100,000 (data not shown; from US\$1 to US\$2,000) with a median of ₱3,000 or approximately US\$60.

Attitudes Towards Family Support

How do older parents feel about these exchanges between them and their children? Table 11.5 shows that a sizeable percentage of OPs (36%) intend to rely on their children for financial support, substantially lower than the proportion who are receiving monetary assistance (64% from co-resident children and 62% from non-co-resident children) at the current stage of their lives. More females (39%) than males (33%) plan to rely on their children for finances. The percentage of OPs who plan to be economically dependent on their offspring rises by age group from 33% amongst those in the youngest age group (60–69) to 49% amongst those aged 80 and over.

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	33.2	38.6	***	32.8	42.3	48.7	**	36.4
Satisfaction with level of contact with children								
Very satisfied	56.8	59.2		58.5	57.0	59.8		58.2
Satisfied but can be improved	38.1	34.6	n.s.	35.8	36.0	37.5	n.s.	36.0
Not satisfied	5.1	6.3		5.7	7.0	2.6		5.8
Total	100.0	100.0		100.0	100.0	100.0		100.0
Satisfaction with level of assistance given by children								
Very satisfied	50.7	51.8	n.s.	50.6	53.2	51.9	n.s.	51.4
Satisfied but can be improved	39.9	37.5		38.4	38.5	39.3		38.5
Not satisfied	6.3	8.5		7.9	7.3	6.3		7.6
Not getting any assistance from any child	3.1	2.2		3.2	1.0	2.5		2.6
Total	100.0	100.0		100.0	100.0	100.0		100.0
N	2,058	3,102		3,462	1,306	389		5,157

** p < 0.01, *** p < 0.001, n.s. = not significant.

Source: Calculated by DRDF using original LSHP data.

When asked about their satisfaction with the level of contact they have with their children, 58% said they are very satisfied and 36% are satisfied, while only 6% said they are not satisfied. The respondents were also asked about their satisfaction with the level of assistance they are receiving from their children. A great majority expressed satisfaction (51% are very satisfied and 39% are satisfied) while only 8% are not satisfied. Worth noting is the 3% of OPs who reportedly do not get any form of assistance at all from their children.

Summary, Conclusions, and Recommendations

The findings presented in this chapter are consistent with those of earlier studies that documented the high involvement of Filipino older parents in various forms of support exchange with their children. This chapter showed that large majorities of OPs either provide or receive support of all forms, except instrumental support. The low level of OPs receiving instrumental assistance is possibly a reflection of the generally favourable health status of the Filipino older population (see Chapter 4).

The flow of intergenerational exchange of resources is reciprocal. Despite their advanced age and possibly limited resources, a large number of Filipino OPs still provide support to their children. Comparing provision vis-à-vis receipt of support, older 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.

The extended family system in the country, characterised by ageing parents residing with their children, appears to be beneficial to both the OPs and their co-resident children, as the survey demonstrated the high level of mutual support exchanges between these two generations. Physical distance, however, does not appear to be a barrier since support of all forms is also being exchanged between older parents and non-co-resident children.

The clear gender divide found in earlier studies is not apparent in the data, particularly in the exchange of communication and provision of support. It is the receipt of support where the sex of the older parents figure prominently. Overall, mothers tend to be beneficiaries of assistance from their children more than fathers – a possible

reflection of the more disadvantaged situation of female vis-à-vis male OPs in terms of employment (see Chapter 3) and their limited personal resources (see Chapter 7). Another possible explanation is that mothers tend to be the conduit of children's financial support to both parents as most mothers play the role of co-manager and family treasurer in Filipino households (Medina, 2015).

In terms of age, younger parents tend to provide support compared to the older cohort of OPs, while the latter have a higher propensity to be recipients of support than the former, particularly in assistance from co-resident children.

A comparison with the results of the 2007 PSOA (Cruz et al., 2016) reveals a lower level of financial support exchanges between parents and children in the LSAHP. Based on PSOA data, more than half (54%) of OPs gave monetary support to their non-co-resident children while the corresponding proportion in the LSAHP is only 24% (Table 11.2). A much higher proportion of OPs also received financial support from non-co-resident children in 2007 compared to a decade later (85% vs 62%, respectively). Such findings may imply that either both generations (parents and children) are showing less generosity to their kin, or that finances have become more limited in recent years compared to the earlier period. A more plausible explanation is the changing attitude towards filial piety similar to that observed in other Asian cultures, such as in Japan (Ogawa et al., 2007) and in South Korea (Harlan, 2014) whereby children may no longer deem it necessary to support older parents while parents may have lowered their expectations for support for fear of becoming a burden to their children. The latter is partly supported by the low proportion of parents who plan to rely on their children for financial support (36%), a level lower than the comparative figure in PSOA (40%).

The diminishing dependence on children particularly on financial matters and the large majority of older Filipinos who desire financial independence suggest that policymakers and programme managers should consider measures to ease 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.

The complexities underlying family exchanges of support deserve further exploration beyond the descriptive analysis in the foregoing discussion. For instance, the absence of gender differentials in intergenerational support exchanges previously found in earlier studies warrants further analysis of the LSAHP data enriched with qualitative research that can provide explanations for the quantitative findings. Future studies could also examine the protective role of intergenerational relations in parental well-being and life satisfaction in the Philippine setting, as widely documented elsewhere (e.g. Brown et al., 2003; Lee et al., 2014; Stoller, 1985; Teerawichitchainan et al., 2015).

References

- Abalos, J., G. Cruz, Y. Saito, and H. Booth (2018), 'Who Cares? Provision of Care and Assistance among Older Persons in the Philippines'. *Journal of Aging and Health*, 30(1), pp.1–20.
- Biddlecom, A., N. Chayovan, and M.B. Ofstedal (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.
- Brown, S.L., R.M. Nesse, A.D. Vinokur, and D.M. Smith (2003), 'Providing Social Support May Be More Beneficial than Receiving It: Results from a Prospective Study of Mortality', *Psychological Science*, 14(4), pp.320–27.
- Cong, Z. and M. Silverstein (2008), 'Intergenerational Support and Depression among Elders in Rural China: Do Daughters-in-Law Matter?', *Journal of Marriage and Family*, 70(3), pp.599–612.
- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- Domingo, L.J. (1995), 'The Family and Welfare of the Filipino Elderly', Professorial Chair Papers Series No. 95-10, Quezon City, Philippines: CSSP Publications.
- Domingo, L.J., B.T.G. Medina, and M.F.A. Domingo (1994), 'The Filipino Elderly', *State of the Nation Reports No. 11*, Quezon City, Philippines: University of the Philippines (UP) Press and UP Center for Integrative and Development Studies.
- Harlan, C. (2014), 'For South Korea's Seniors, a Return to Poverty as Confucian Filial Piety Weakens', *The Washington Post*, 20 January. Retrieved from https://www.washingtonpost.com/world/asia_pacific/for-south-koreas-seniors-a-return-to-poverty-as-confucian-filial-piety-weakens/2014/01/20/19769cf2-7b85-11e3-97d3-b9925ce2c57b_story.html.

- Lee, H.J., J. Lyu, C.M. Lee, and J.A. Burr (2014), 'Intergenerational Financial Exchange and the Psychological Well-Being of Older Adults in the Republic of Korea', *Aging & Mental Health*, 18(1), pp.30-39.
- Medina, B.T.G. (2015). *The Filipino Family*, 3rd ed. Quezon City: University of the Philippines Press.
- Natividad, J. and G. Cruz (1997), 'Patterns in Living Arrangements and Familial Support for the Elderly in the Philippines', *Asia-Pacific Population Journal*, 12(4), pp.17-34.
- 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.
- Stoller, E.P. (1985), 'Exchange Patterns in the Informal Support Networks of the Elderly: The Impact of Reciprocity on Morale', *Journal of Marriage and the Family*, 47(3), pp.335-42.
- Teerawichitchainan, B., W. Pothisiri, and G.T. Long (2015), 'How Do Living Arrangements and Intergenerational Support Matter for Psychological Health of Elderly Parents? Evidence from Myanmar, Vietnam, and Thailand', *Social Science & Medicine*, 136-37, pp.106-16.

Caring for Older Persons

Elma P. Laguna

As the share of older Filipinos is expected to increase in the coming years, Filipino families, the government, and society in general will have to confront the challenges of providing care and support to the older population. The challenge is even more daunting considering that population ageing, albeit occurring more slowly in the Philippines than in other Asian countries, is happening alongside other demographic phenomena such as declining fertility, longer life expectancy, increased female labour force participation, and internal and international migration, particularly of the younger segment of the population. Ageing is often associated with chronic morbidity, which in turn may affect physical health and functioning, and results in dependency on others.

In a familistic society such as the Philippines, the family is at the forefront of ensuring the welfare of its members, such as children and OPs. This is even inscribed in the 1987 Philippine Constitution. Article 15, Section 4 of the Constitution states that ‘it is the duty of the family to take care of the elderly members while the State may design programs of social security for them’. Filipinos have relied mainly on the family for care and protection (Jocano, 2001; Medina, 2001). The Philippine Elderly Survey in 1996 found that 44% of older Filipinos received some form of care from their children (Concepcion and Perez, 2006). Cruz et al. (2016), using data from the 2007 Philippine Study of Aging, reported that 48% of older Filipinos expect their children to take care of them in times of illness, while 35% mentioned their spouses as possible caregivers.

Despite the ubiquity of caregiving within the family, particularly caring for OPs, little is known about this phenomenon. Ageing in the Philippine context is characterised as being cared for at home and is mainly family-based and family-oriented assistance (Antonio, 2015). But in the context of the changing demographic and socioeconomic landscape of Philippine society, how is caring for OPs affected? What is the profile of the caregivers of OPs? Are they still mainly family members?

This chapter aims to describe the situation of caregiving for OPs in the Philippines, from the perspective of primary and potential caregivers whom the OPs themselves have identified. The caregiver questionnaire is one of the main tools used in the Longitudinal Study of Aging and Health in the Philippines (LSAHP).

Table 12.1. Type of Caregiver by Sex and Age of Older Person

Type of Caregiver	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Primary	6.2	7.4	3.7	5.9	26.0	7.0
Potential	93.8	92.6	96.3	94.1	74.0	93.1
<i>N</i>	2,004	2,951	3,064	1,290	601	4,955

Source: Calculated by DRDF using original LSAHP data.

Caregiving, Family Care, and Informal Care

Family caregiving is defined as ‘occurring when one or more family members give aid or assistance to other family members beyond that required as part of normal everyday life’ (Walker et al; 1995, p. 402). In the literature, family caregiving is often equated with informal caregiving, which refers to the ‘unpaid care provided to an older and dependent person by someone with whom they have a social relationship, such as a spouse, parent, child, other relative, neighbour, friend, or other non-kin’ (Triantafillou et al., 2010).

Across all societies, the family is steadfast in its role as the primary source of care; in some societies, it is a form of old-age security (Matthews, 1988; Ugargol and Bailey, 2018). Families may differ in how caregiving is manifested, as well as in members’ expectations regarding caring responsibilities. In Asia, the roles and responsibilities of caring for older adults are often governed by cultural values and norms such as filial piety, altruism, family cohesion, and familism (Kadoya and Khan, 2017). These familial values explain the motivations of family members to provide care, especially for older family members.

The concept of *utang na loob* or debt of gratitude underlines Filipinos' desire to take care of their parents in old age. The study of Wongsawang et al. (2013) on family caregiving amongst Thais stresses a similar point. Family caregiving in the context of Buddhism emphasises the concepts of suffering, acceptance, management, and compassion. Akin to the Filipinos' value of *utang na loob*, Thais view caring for parents and older relatives as a form of 'repayment' for the good parenting they received early in their lives. Thus, family caregiving or informal care is seen as a function of commitment and affection, in contrast to formal caregiving, which is not seen as 'care' but as 'work' (Abel and Nelson, 1990). According to Finch and Groves (1983), formal caregiving, particularly institutional care, is considered an unattractive alternative to the care provided by the family. However, while the norm leans towards family caregiving, the shift to institutional care may be inevitable, particularly when the need for medical care and the recipient's level of dependence increase (Litwak, 1985). The traditional notion of younger generations as providers of support to the older generation is still prevalent and is viewed as part of intergenerational solidarity, but this has changed dramatically in recent years. Current trends in family patterns, such as lower fertility, female labour force participation, and internal and international migration, lead to a smaller family size and a reduced pool of potential caregivers (Schulz and Eden, 2016).

Caregiving as Women's Work

Caregiving work is always associated with women's work. Existing surveys on caregivers attest to the dominance of women's involvement in this kind of work. The 2011 National Survey of Caregivers in the United States found that most family caregivers were middle-aged daughters or spouses. Women also make up the majority of care recipients (Schulz and Eden, 2016). Results of studies conducted in Asia, particularly the Philippines, also show the important role played by female spouses and daughters, especially those co-residing with their parents, in assisting with carrying out activities of daily living (ADLs) and instrumental activities of daily living (Abalos et al., 2018; Alvarez, Ong, and Abocejo, 2017). In an earlier study on the provision of support to older Filipinos, daughters rather than sons were identified as the major providers of parental care (Natividad and Cruz, 1997). Compared to children with their own families, unmarried children are more likely to take care of their parents in old age (Costello, 1994; Natividad and Cruz, 1997). Close family members and other relatives can also be relied on as providers of support in almost all stages of the life course (Domingo and Casterline, 1992; Natividad, 2000).

Even with migration, left-behind older parents are provided with financial, material, instrumental, and emotional support by their adult children (Laguna, 2013). This implies that geographic distance does not hinder intergenerational exchange in Filipino families. The Global Ageing Survey, conducted in 2005–2008 covering 21 countries, also points to the significant impact of gender on support exchange: women have a higher likelihood of receiving support from their children and have a greater tendency to be the providers of support, particularly caregiving, than men (Khan, 2013).

In their critical review of informal caregiving, Walker et al. (1995) argued that the common perception of caregiving as women's work or as part of the normal activities they assume in the household masks the contribution of women to family caregiving. Women also tend to underestimate the burden of care work because of the ingrained notion of caregiving as an obligation or normative duty (Raschick and Ingestroll-Dayton, 2004). Thus, the time and effort that women provide as caregivers in addition to the competing demands of their various roles both within and outside the household become invisible (Ashwin et al., 2013; Ugargol and Bailey, 2018).

Caregiving in the Filipino Context: Results from the LSAHP

The LSAHP includes a survey of caregivers, either primary or potential, that the OP respondents identified. Of the 5,985 OP respondents, 5,965 answered the question on whether they have a primary caregiver, and 14% of them responded in the affirmative. The concept of 'primary caregiving' was not explicitly defined in the survey but was left to the respondent's own interpretation. The OP's consent to interview the person he/she identified as either primary or potential caregiver was sought. Amongst those who said they have a primary caregiver, only 9 (out of 838) did not consent to the caregiver interview.

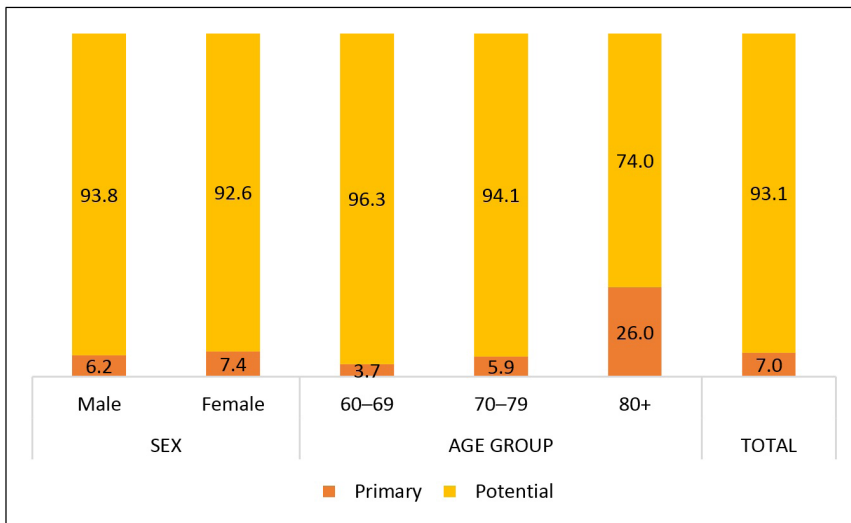
However, while 14% of the OPs said they have a primary caregiver, a quarter of those identified as caregivers do not consider themselves primary caregivers. In the same token, 19 identified by OPs as potential caregivers considered themselves primary caregivers.

Notwithstanding the dissonance between the perceptions of OPs and caregivers on caregiving responsibilities, the chapter focuses more on the caregivers' survey. The results of this survey are discussed by considering the basic profile of the OP

respondents, such as their age and sex. The profile of both primary and potential caregivers will be presented in terms of their relationship to the OPs, the caregiving situation of primary caregivers, and the willingness of potential caregivers to assume the responsibility of caregiving.

Based on the caregivers' survey, an overwhelming majority (93%) of OPs do not yet have a primary caregiver but identified their potential caregiver in case they will be needing one in the future. Only 7% of OPs have a primary caregiver; the proportion is slightly higher amongst older females than males (7% vs 6%) and more dominant in the older age group of 80 and over at 26% (Figure 12.1).

Figure 12.1. Percent Distribution of Primary and Potential Caregivers, by Older Persons' Sex and Age



Source: Calculated by DRDF using original LSAHP data.

Who Cares for the OPs? A Profile of Primary Caregivers

For both male and female OPs, the majority of caregivers are women (96% vs 82%, respectively) (Table 12.2). Only 13% of all primary caregivers are males. For female caregivers, the mean age is 46.2 years; male caregivers are slightly older, with a mean age of 59.5. Younger caregivers (below 40 years old) are taking care of OPs who are below 80 years old. However, the pattern is reversed for the care of those older than 80, where caregivers aged 40-49 predominate (28% vs 25% and 8% amongst those aged 70-79 and 60-69, respectively).

Sixty percent of caregivers are married, while 19% have never been married. In terms of education, 44% have reached at least the high school level, while one in five have a college education or higher. More than a third of the caregivers (36%) are working, while 42% reported having completely stopped working.

Table 12.2. Characteristics of Primary Caregivers of Older Person

Characteristics	SEX			AGE GROUP			TOTAL
	Male	Female	Sig	60-69	70-79	80+	
Sex							
Male	4.0	17.9	14.8	18.1	8.9	12.8	12.8
Female	96.0	82.1	85.2	81.9	91.1	87.2	87.2
Age							
Below 20	0.0	0.4	0.5	0.0	0.1	0.2	0.2
20-29	5.5	5.2	7.4	7.4	2.8	5.3	5.3
30-39	5.0	31.3	42.6	12.9	11.0	21.7	21.7
40-49	11.9	25.3	7.7	24.8	27.6	20.5	20.5
50-59	22.1	20.2	15.1	14.8	28.0	20.9	20.9
60-69	28.3	12.7	25.5	14.5	15.0	18.3	18.3
70-79	23.3	3.9	1.2	21.8	12.6	10.9	10.9
80+	4.0	1.1	0.0	3.8	2.9	2.2	2.2
Mean age	59.47	46.24	45.64	54.15	53.44	51.05	51.05
Marital status							
Never married	7.8	25.9	29.8	12.5	15.1	19.3	19.3
Currently married	77.4	50.9	55.7	71.1	58.8	60.5	60.5
Living in	10.3	10.3	11.4	10.4	9.4	10.3	10.3
Separated/Divorced/Annulled	3.4	6.5	3.1	5.5	7.0	5.4	5.4
Widowed	1.2	6.5	0.0	0.6	9.7	4.5	4.5
Education							
No schooling/elementary	51.4	27.0	27.3	42.1	39.0	35.9	35.9
High school	37.2	48.6	37.8	47.1	48.0	44.5	44.5
College+	11.4	24.4	34.9	10.9	13.0	19.7	19.7
Type of place of residence							
Rural	70.6	72.6	69.4	75.7	71.8	71.9	71.9
Urban	29.4	27.4	30.6	24.3	28.2	28.1	28.1
Work status							
Working	36.6	35.4	39.1	29.6	36.5	35.8	35.8
Stopped working completely	44.3	41.2	44.5	41.9	41.0	42.4	42.4
Never worked	19.1	23.4	16.3	28.5	22.5	21.8	21.8
% with caregiver training	1.4	6.7	5.4	2.8	5.3	4.8	4.8
N	125	219	112	76	156	344	344

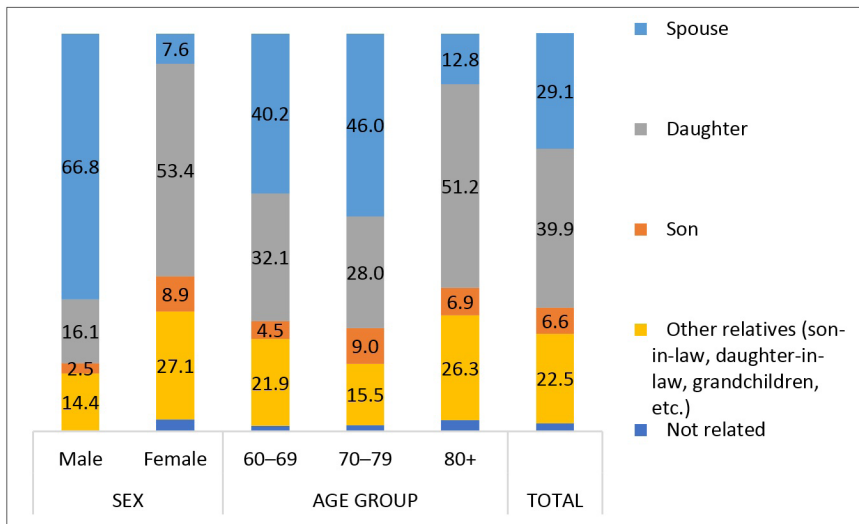
Source: Calculated by DRDF using original LSHP data.

Only 5% of the primary caregivers reported having received training in caregiving. Compared to male OPs, more female OPs are being cared for by a trained caregiver (7% vs 1%).

As a whole, daughters make up the bulk of primary caregivers (40%), followed by spouses (29%) and daughters-in-law (9%).

Spousal caregiving is enjoyed more by male OPs, as 67% of them have their wives as their primary caregivers. In contrast, only 8% of older females identified their husbands as their primary caregivers. Spousal caregiving is more common in the earlier stage of ageing (ages 60–69 and 70–79) and declines in more advanced age (ages 80+).

Figure 12.2. Relationship of Primary Caregivers to Older Persons, by Sex and Age



Source: Calculated by DRDF using original LSAHP data.

With regard to intergenerational caregiving or having their children as primary caregivers, more than half (53%) of older women are cared for by their daughters compared to older men (16%). Sons are also more likely to take care of their mothers than their fathers; 9% of older women reported their sons as their primary caregivers compared to 2% of older men (Figure 12.2).

Table 12.3. Relationship and Living Arrangement of Primary Caregiver to and with Older Person, by Sex and Age of Older Person

Relationship and Living Arrangement	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Relationship to older person						
Spouse	66.8	7.6	40.2	46.0	12.8	29.1
Son	2.5	8.9	4.5	9.0	6.9	6.6
Daughter	16.1	53.4	32.1	28.0	51.2	39.9
Son-in-law	0.0	0.2	0.0	0.3	0.1	0.1
Daughter-in-law	5.1	11.1	13.1	4.7	7.9	8.9
Grandson	0.6	1.2	0.2	3.0	0.6	1.0
Granddaughter	1.3	7.0	0.4	4.4	8.5	4.9
Other relative	7.4	7.6	8.2	3.1	9.2	7.6
Not related	0.2	3.0	1.3	1.5	2.8	2.0
Living arrangement with Older Person						
Lives with Older Person	85.7	80.9	84.0	83.7	81.1	82.6
Lives next door	6.2	13.7	7.7	8.6	14.6	11.0
Lives in same barangay	4.1	5.4	3.9	7.8	4.3	4.9
Lives in same city/municipality	0.0	0.0	0.0	0.0	0.0	0.0
Lives in same province	4.0	0.0	4.5	0.0	0.0	1.5
N	125	220	112	75	157	344

Source: Calculated by DRDF using original LSAHP data.

Geographic proximity is a factor in the caregiving arrangements of Filipino families. About 8 in 10 (83%) caregivers co-reside with the OP, and the level is almost similar across the OPs' age groups and between gender. Non-co-resident caregivers, on the other hand, are likely to be living next door to the OP or in the same barangay as the OP (Table 12.3). Half of the caregivers reported being of average health, while 19% said they are very healthy.

More caregivers who are taking care of female OPs reported being very healthy (26%) compared to caregivers who are looking after male OPs (8%). Similarly, a higher proportion of caregivers of older males reported being somewhat unhealthy (18%), in contrast to 10% amongst caregivers of older females.

This could be because female OPs are being taken care of by their children, especially daughters, while male OPs by their spouses, who might also be facing similar age-related health problems as their husbands (Table 12.4).

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

Self-Assessed Health Status	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Current health status						
Very healthy	7.5	26.0	23.3	16.8	17.6	19.3
Healthier than average	22.5	14.5	17.1	27.2	12.9	17.4
Of average health	52.2	49.4	47.8	52.1	51.5	50.4
Somewhat unhealthy	17.6	9.6	11.8	3.9	17.2	12.5
Very unhealthy	0.2	0.4	0.0	0.0	0.8	0.3
<i>N</i>	124	219	112	77	155	344

Source: Calculated by DRDF using original LSHP data.

Older Persons' Need for Care: A Caregiver's Assessment

Based on the caregivers' assessment, 86% of OPs have difficulty in performing at least one ADL. This is slightly higher than the self-report of OPs themselves. While only 22% of OPs reported to have difficulty in performing at least one ADL, the proportion is higher amongst those with primary caregivers (see Chapter 5).

The proportion is higher amongst older women than men (89% vs 80%) and, as expected, increases with age. Of all the activities mentioned, going out or leaving the house is the most common activity performed with difficulty by OPs (78%). This is followed by using the toilet (62%), taking a bath/shower by oneself (61%), and standing up from a bed or chair and sitting on a chair (60%). In all ADLs, more female than male OPs experience difficulty. Across age groups, only in activities such as walking around the house and going outside showed a clear pattern of association between age and experience of difficulty. The proportion that reported difficulty in performing these activities increase with age (Table 12.5).

Table 12.5. Primary Caregiver's Perception on Older Person's ADL Difficulty by Sex and Age of Older Person

Percent of OPs with ADL Difficulty	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Activities of daily living						
Take a bath/shower by oneself	50.6	66.5	60.1	60.0	61.4	60.7
Dress	48.9	62.2	57.9	58.3	56.5	57.4
Eat	29.9	37.6	39.9	38.4	29.3	34.8
Stand up from a bed/chair, sit on a chair	58.4	61.6	57.2	61.7	62.1	60.4
Walk around the house	54.9	62.2	34.9	67.7	73.4	59.5
Go outside (leave the house)	70.3	82.4	68.5	76.6	85.5	78.0
Use the toilet	49.8	69.3	60.5	59.5	64.6	62.1
% who experienced at least one ADL difficulty	79.9	88.7	78.6	86.1	90.1	85.5
<i>N</i>	125	220	112	76	156	344

ADL = Activities Daily Living, OP = older person.

Source: Calculated by DRDF using original LSAHP data.

For almost all ADLs, the majority of OPs with difficulty performing the ADLs were assessed as in need of assistance. More female OPs than male OPs need assistance in taking a bath/shower, standing up from a bed/chair, and using the toilet. The pattern is not as consistent when the age of the OP is considered. In most activities, there is an unexpected decline in the proportion of OPs in the older age groups who are assessed to need assistance compared to the younger age group. For example, 99% of caregivers reported that OPs aged 60–69 need assistance in the use of the toilet. This declined to 96% amongst 70–79 and 92% in the 80+ age category. A similar pattern is observed in activities such as going outside the house, standing up from a bed/chair, and sitting on a chair (Table 12.6).

Table 12.6. Primary Caregiver's Perception of the Need for Assistance of Older Person with ADL Difficulty by Sex and Age of Older Person

Percent of OPs who Need Assistance to Perform the ff. Activities:	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Activities of daily living						
Take a bath/shower by oneself	88.7	98.9	92.9	97.5	97.1	95.8
<i>N</i>	63	144	68	45	95	208
Dress	95.4	95.1	94.5	90.4	98.1	95.2
<i>N</i>	61	136	66	44	88	198
Eat	75.3	87.0	96.8	71.8	77.3	83.3
<i>N</i>	37	82	44	29	45	118
Stand up from a bed/chair, sit on a chair	72.5	92.3	87.3	81.4	85.9	85.3
<i>N</i>	73	134	64	47	95	206

Percent of OPs who Need Assistance to Perform the ff. Activities:	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Walk around the house	91.1	90.7	95.8	91.6	88.8	90.8
<i>N</i>	69	136	40	51	114	205
Go outside (leave the house)	97.2	92.1	90.6	96.8	94.3	93.8
<i>N</i>	87	179	77	58	132	267
Use the toilet	93.8	95.7	99.1	95.5	92.3	95.1
<i>N</i>	62	150	68	45	100	213
% who need assistance for at least one ADL difficulty	97.7	99.0	98.8	98.2	98.6	98.6
<i>N</i>	100	195	89	65	141	295

ADL = activities of daily living, OP = older person.

Source: Calculated by DRDF using original LSAHP data.

Caregivers are more involved in assisting OPs with household tasks than with personal care. Amongst female OPs, 94% of caregivers help in household tasks, 79% assist OPs with personal care, and 67% assist older women in activities related to moving around the house, going out, and visiting family and/or friends (Table 12.7). In contrast, a lower proportion of caregivers aid male OPs in performing these activities.

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

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	88.5	94.3	86.9	95.3	94.4	92.2
Personal care	71.3	78.8	74.3	81.8	74.5	76.1
Moving around the house, going on outings, visiting family or friends, etc.	49.7	67.2	61.9	59.4	60.7	60.8
<i>N</i>	125	218	113	76	155	344
Mean number of hours per week spent caring for OP						
Household tasks	35.09	29.69	27.13	36.61	32.13	31.6
<i>N</i>	111	202	98	72	142	313
Personal care	31.87	24.35	19.73	33.29	28.78	26.94
<i>N</i>	89	170	84	62	113	259
Moving around the house, going on outings, visiting family or friends, etc.	30.93	21.88	21.86	28.19	25.02	24.64
<i>N</i>	62	142	70	44	90	204
<i>N</i>	62	142	44	90	204	2.2

Source: Calculated by DRDF using original LSAHP data.

However, when it comes to the number of hours per week spent on caring for the OP, caregivers reported a higher average number of hours spent on older males than females in all the activities. Furthermore, more hours per week were spent on assisting OPs in more advanced ages (70 and over) than in the younger age group (60–69).

Using a 10-point scale (1 = *easy*, 10 = *difficult*), caregivers reported that caring for OPs has a mean level of difficulty of 5.44 (Table 12.8). The mean is slightly higher for male OPs (5.8) than for female OPs (5.2). Across age groups, caregivers have more difficulty in caring for OPs aged 80 and over (5.8 vs 5.6 and 4.7 for those aged 70–79 and 60–69, respectively). Thirteen percent of caregivers found caring for OPs difficult, while a slightly lower proportion (9%) found caring for OPs easy.

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

Difficulty	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Difficulty in caring for Older Person						
1	4.4	12.0	12.0	10.8	6.7	9.3
2	4.4	4.5	4.2	1.4	6.1	4.5
3	8.8	20.3	33.2	6.0	9.6	16.1
4	13.8	3.1	2.4	13.1	7.2	7.0
5	24.4	18.9	14.7	25.7	22.8	20.9
6	9.8	9.5	7.2	13.0	9.6	9.6
7	2.0	4.6	2.1	6.4	3.3	3.6
8	12.5	12.0	14.5	4.3	14.5	12.2
9	8.6	1.6	0.9	8.1	4.5	4.2
10	11.3	13.4	8.9	11.2	15.8	12.6
Mean level of difficulty in caring of Older Person	5.80	5.23	4.74	5.55	5.85	5.44
<i>N</i>	122	212	104	76	155	334
Median duration (in months) spent taking care of Older Person	6.00	11.49	5.00	4.00	24.00	8.00
<i>N</i>	125	218	113	76	155	343
Reason for being the primary caregiver						
I volunteered	64.0	30.0	39.5	50.0	40.8	42.4
Older Person requested me	5.1	9.1	2.8	2.8	13.4	7.6
Other family members requested me	4.6	6.3	3.7	7.8	6.1	5.7
I am the only one available	21.2	47.7	48.1	33.0	33.1	38.0
Others (Older Person took care of me as a child, lives with Older Person, etc.)	5.1	7.1	6.0	6.4	6.6	6.4
<i>N</i>	124	218	112	76	154	342

Source: Calculated by DRDF using original LSAHP data.

The median duration of caregiving is 8 months. Caregivers, however, spent a longer time taking care of older females than males (11 months vs 6 months) and of those aged 80 and over (24 months vs 5 and 4 months for those aged 60–69 and 70–79, respectively).

When asked why they are the ones providing primary care to the OP, 42% of the caregivers said they volunteered for the job while 38% said they are the only ones available. Amongst the caregivers of male OPs, 64% said they volunteered to do the job, while 21% said they are the only ones available to provide care; the corresponding percentages for caregivers of female OPs are 30% and 48%, respectively. Across age groups, 13% of caregivers of OPs aged 80 and over said they were requested by the OP to be the primary caregiver. This is in stark contrast to the less than 4% of caregivers who were requested by those aged 60–69 and 70–79.

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

Situation as a Caregiver	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
% who agree or strongly agree with the ff. statements:						
I gained personal satisfaction from performing my care tasks	79.3	77.7	80.9	72.1	79.4	78.3
I have problems with Older Person (e.g., demanding, communication problems, behaves differently)	33.3	20.9	19.0	37.9	24.0	25.4
I have problems with my own mental health	19.9	20.7	28.1	21.4	14.2	20.4
I have problems with my own physical health	23.1	31.9	35.9	17.7	28.8	28.7
I have problems combining my daily activities	25.4	33.8	33.4	26.9	30.7	30.8
I have financial problems concerning my care tasks for Older Person	53.3	38.3	39.1	44.2	46.9	43.7
I have support from family/friends/neighbors/paid help in performing my care tasks for Older Person	48.2	51.6	52.9	45.4	50.9	50.4
<i>N</i>	125	218	113	76	155	344

Source: Calculated by DRDF using original LSHP data.

Finally, the majority of caregivers are satisfied in the performance of their care tasks, with 78% agreeing with the statement that they gained personal satisfaction in doing caregiving activities (Table 12.9). This statement was found true regardless of the care recipient's gender and age. Half of the caregivers also agreed that they have support from family/friends/neighbours/paid help in performing their care tasks.

While caring for either male or female OPs does not seem to differ much, notable differences still exist when it comes to the caregivers' attitudes and assessment of their situation. Amongst caregivers who are taking care of male OPs, more than half reported having financial problems concerning their care tasks (53%). In contrast, only 38% of caregivers of female OPs agreed with the same statement. This could be due to the fact that majority of the caregivers of male OPs are either their spouse or daughter who likely do not have jobs and, thus, do not have a stable source of income. Financial difficulty associated with caregiving tasks is also higher amongst caregivers who are looking after OPs of more advanced age. More caregivers of OPs in the younger age group (60–69) than those in the older age group (70–79 and 80+) agreed to the statements that they also have problems with their own mental and physical health.

Who Will Care for Older People? A Profile of Potential Caregivers

The OP respondents of the LSAHP, particularly those who reported not having a primary caregiver at the time of the interviews, were asked about the prospect of needing care later in life. Respondents were asked to identify the person who will most likely provide them with care should they need it in the future.

Almost a third of potential caregivers mentioned by the OP respondents are males (29%). This is more than double the percentage of primary caregivers who are males (13%). This suggests a high expectation towards spousal caregiving but since men die earlier than women, when the need for caregiving arises, majority of older women would be taken care of by their children rather than by their spouse. The same pattern found in actual caregiving practice exists – both male and female OPs prefer females as potential caregivers (Table 12.10).

In terms of age, potential caregivers are younger than primary caregivers, with a mean age of 45.5. Between male and female OPs, the choice of potential caregivers differs significantly when age is considered: the mean age of caregivers amongst male OPs is 49.4, while that for the female OPs is 43. Across age groups, caregivers of OPs in the older group have higher average age compared to the younger age group. Similar to the primary caregivers, the majority of potential caregivers are currently married (66%) and have at least a high school education (43%). More than half are currently working (55%), with the proportion slightly higher amongst those who were mentioned by female OPs (58% vs 50%). Sixty-one percent are residing in rural

areas. A very small proportion of those identified as potential caregivers has caregiver training (2%).

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

Characteristics	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Sex						
Male	18.5	36.9	29.8	29.2	27.4	29.4
Female	81.5	63.1	70.2	70.8	72.6	70.6
Age						
Below 20	1.1	2.6	1.1	4.2	1.8	2.0
20-29	15.9	17.0	19.5	11.4	11.1	16.6
30-39	13.2	26.0	21.5	22.4	11.9	20.8
40-49	10.2	25.3	16.8	24.4	20.6	19.1
50-59	27.4	12.7	17.4	17.1	31.2	18.7
60-69	25.7	12.5	22.0	9.4	13.8	17.9
70-79	6.1	3.3	1.6	10.4	7.5	4.5
80+	0.5	0.5	0.1	0.7	2.2	0.5
Mean age	49.37	42.89	44.85	45.69	49.64	45.53
Marital status						
Never married	13.8	17.4	14.8	16.6	21.0	15.9
Currently married	71.9	62.7	69.1	63.6	56.0	66.4
Living in	11.8	14.2	12.9	14.9	10.9	13.2
Separated/Divorced/Annulled	1.7	4.0	2.4	3.2	7.4	3.1
Widowed	0.9	1.8	0.8	1.8	4.7	1.4
Education						
No schooling/elementary	46.2	33.0	38.4	38.7	36.9	38.4
High school	35.7	48.7	44.1	42.0	42.6	43.4
College+	18.1	18.3	17.4	19.3	20.5	18.2
Type of place of residence						
Rural	62.7	59.3	60.6	59.0	66.1	60.7
Urban	37.3	40.7	39.5	41.0	33.9	39.3
% currently working	49.7	58.1	53.0	58.6	54.7	54.7
% with caregiver training	2.2	2.4	2.0	2.8	3.1	2.3
<i>N</i>	1,879	2,731	2,952	1,214	445	4,611

Source: Calculated by DRDF using original LSAHP data.

As with primary caregivers, OPs will likely rely on their family for caregiving. Daughters account for a third (32%) of the caregivers mentioned by OPs, followed by the OPs' spouse (31%) and sons (15%). The majority (64%) of caregivers mentioned by OPs live with them. About one in five live in the same barangay, while 15% live next door (Table 12.11).

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

Indicators	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Relationship to Older Person						
Spouse	52.6	16.3	38.6	20.7	10.9	31.2
Son	13.8	15.5	13.6	16.9	17.2	14.8
Daughter	19.3	41.4	30.8	35.5	34.1	32.3
Son-in-law	0.5	0.6	0.3	0.6	2.4	0.6
Daughter-in-law	2.8	7.8	5.2	5.7	9.4	5.8
Grandson	1.4	1.5	0.1	3.6	4.3	1.5
Granddaughter	1.4	6.3	2.4	7.1	9.4	4.3
Other relative	7.5	9.6	8.2	9.3	11.1	8.8
Not related	0.8	0.9	0.9	0.8	1.2	0.9
<i>N</i>	1,874	2,703	2,917	1,214	445	4,576
Living arrangement with Older Person						
Lives with Older Person	76.5	55.3	66.2	59.9	60.0	63.9
Lives next door	11.5	17.0	14.2	16.4	13.9	14.8
Lives in same barangay	11.0	25.3	17.8	22.1	23.6	19.5
Lives in same city/municipality	0.8	1.7	1.5	1.3	0.6	1.4
Lives in same province	0.1	0.1	0.0	0.1	0.7	0.1
Lives in a different province	0.2	0.6	0.4	0.2	1.2	0.4
<i>N</i>	1,878	2,729	2,948	1,213	444	4,605

Source: Calculated by DRDF using original LSAHP data.

When asked how they assess their current health status, close to half (43%) said they are of average health, while half said their health is either better than average or that they are very healthy at the moment. Only 8% rated themselves somewhat unhealthy. Potential caregivers expressed their willingness to assume the responsibility of caregiving should the OP need it in the future. (Table 12.12).

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

Self-Assessed Health Status	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Current health status						
Very healthy	19.8	25.8	23.9	22.4	22.7	23.4
Healthier than average	26.8	25.8	26.1	26.5	26.6	26.2
Of average health	42.9	42.7	42.3	44.0	43.2	42.8
Somewhat unhealthy	10.3	5.6	7.8	6.9	7.5	7.5
Very unhealthy	0.1	0.0	0.0	0.2	0.0	0.0
% willing to assume responsibility as caregiver	99.9	99.9	100.0	99.9	99.7	99.9
<i>N</i>	1,878	2,729	2,948	1,213	444	4,605

Source: Calculated by DRDF using original LSAHP data.

Summary, Conclusions, and Recommendations

One major challenge faced by ageing societies is the increasing demand for caregiving arrangements, especially long-term care. Ageing is often associated with declining health and limited functional abilities. While the Philippines does not yet have an ageing population, indications suggest that in the near future, it will also have to deal with the issues resulting from an increasing number of older people. This prospect will occur alongside other demographic phenomena, such as declining fertility, longer life expectancy, the continuous migration of the younger population to urban areas and other countries. These have repercussions on family life and arrangements, amongst them family caregiving practices.

Using data from the survey of caregivers of OPs in the Philippines, we were able to explore the current caregiving arrangements amongst those with primary caregivers, as well as the prospects for those who are not yet care recipients. The survey also provides data on the profile of those who provide and will provide care to OPs.

Results show that only 7% of OPs aged 60 and over have primary caregivers. This implies that the majority are still independent and do not need any long-term care. This confirms the finding in the previous chapter on intergenerational exchange, where instrumental support is the least form of support received by OPs from their children.

Females make up the majority of primary caregivers and are the preferred potential caregivers. This gender preference for caregiving tasks becomes more meaningful when situated within family relationships. The gendered notion of family caregiving is evident in the results of the study: spousal caregiving is more associated with the wives providing care for their husbands, while intergenerational caregiving is synonymous with daughters taking care of either their fathers or mothers. This pattern is also replicated in succeeding generations, where granddaughters are more involved than grandsons in caring for their grandparents. The sons' caregiving duties are even passed on to their wives; thus, next to daughters, the daughters-in-law assume the caregiving responsibility. But a look at older Filipinos' preference for potential caregivers reveals that male family members are also expected to assume the caregiving responsibility. For instance, 15% of OPs expect their sons to take care of them in old age. In actual practice, however, only 7% of OPs have their sons as primary caregivers.

Moreover, the fact that the average age of primary caregivers is 51 suggests that they are in the stage of life where they might have to juggle the responsibilities of family life, such as being a parent and/or a spouse. With females comprising the bulk of primary caregivers, the double burden of caring is heavier on Filipino women.

Co-resident family members are more likely to provide care than non-co-resident family members, indicating that proximity is a factor in the provision of care. While the migration of the younger generation might cause some disruptions in the expected pattern of care provision, the results also highlight the presence of other kin close by who could provide caregiving support to the OP.

Based on the caregivers' assessment, the majority of OPs they are taking care of have difficulty with at least one ADL, and that they need help in performing some ADLs such as going out of the house, standing up from the bed or chair, using the toilet, and taking a bath. These functional limitations are more common amongst female OPs than male OPs. An interesting finding is that caregivers provide more assistance in household tasks than in the personal care of OPs. To some extent, this may imply that caregiving duties are viewed as part of the normal household chores of the designated primary caregiver. This finding is in line with the female orientation of caregiving tasks as well as the expectation that these are the normative duties of women in the household.

The majority of primary caregivers said they volunteered for the task and, in general, found personal satisfaction from performing their care tasks. Almost all potential caregivers expressed their willingness to take on the caregiving responsibility when the need arises. These findings signal that all is well when it comes to the care of OPs in the Philippines, but the critical question is for how long. What kinds of intervention programmes or policies can be put in place to help families care for their ageing members?

The results of the caregivers' survey confirm the notion of caring for OPs as family based and family oriented. This could take the form of either spousal or intergenerational caregiving. The results, however, highlight mainly the experience of the traditional Filipino family. With the changing family structure and composition, the kind of caregiving experienced by those who do not have a spouse or children is also worth noting. This is one area that could be explored in future studies.

References

- Abalos, J.B., Y. Saito, G.T. Cruz, and H. Booth (2018), 'Who Cares? Provision of Care and Assistance among Older Persons in the Philippines', *Journal of Aging and Health*, 30(10), pp.1536–55. doi:10.1177/0898264318799219 (accessed 21 July 2019).
- Abel, E. and M. Nelson (eds.) (1990), *Circles of Care: Work and Identity in Women's Lives*. Albany, NY: SUNY Press.
- Alvarez, I.C., M. Ong, and F. Abocejo (2017), 'Learning Needs and Quality Care among Family Caregivers and Elderly Patients of Guadalupe, Cebu City, Central Philippines', *European Scientific Journal*, 13(24), pp.356–76.
- Antonio, A. (2015), Challenges to the Filipino Elderly as Traditional Caregivers: The Changing Landscape of Long-Term Care Management of the Filipino Elderly: Prospects for a Community-Based Communal Health Care (Unpublished paper). Manila: Department of Political Science, De La Salle University.
- Ashwin, S., I. Tartakovskaya, M. Ilyina, and T. Lytkina (2013), 'Gendering Reciprocity: Solving a Puzzle of Nonreciprocation', *Gender & Society*, 27(3), pp.396–421. doi:10.1177/0891243213479444 (accessed 21 July 2019).
- Concepcion, M.B. and A.E. Perez (2006), 'Intergenerational Support Mechanisms for Filipino Elderly', in H. Yoon and J. Hendricks (eds.), *Handbook of Asian Aging*. Amityville, NY: Baywood, pp.293–317.
- Costello, M.A. (1994), 'The Elderly in Filipino Households: Current Status and Future Prospects', *Philippine Sociological Review*, 42(1/4), pp.53–77.
- Cruz, G.T., J.N. Natividad, M.L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- Domingo, L.J. and J.B. Casterline (1992), 'Living Arrangements of the Filipino Elderly', *Asia-Pacific Population Journal*, 7(3), pp.63–88.
- Finch, J. and D. Groves (eds.) (1983), *A Labour of Love: Women, Work, and Caring*. Henley-on-Thames, United Kingdom: Routledge and Kegan Paul.
- Jocano, F.L. (2001), *Filipino Worldview: Ethnography of Local Knowledge*. Quezon City, Philippines: PUNLAD Research House.
- Kadoya, Y. and M.S.R. Khan (2017), 'Gender Differences in the Long-Term Care of Older Parents: Evidence from India', *Journal of Family Studies*, pp.1–16. doi:10.1080/13229400.2017.1279561 (accessed 21 July 2019).
- Khan, H. (2013), 'Factors Associated with Intergenerational Social Support among Older Adults across the World', *Ageing International* 39(4), pp.289–326.
- Laguna, E. (2013), Intergenerational Exchange of Support and International Migration in the Philippines (Unpublished doctoral thesis). Bremen, Germany: University of Bremen.
- Litwak, E. (1985). *Helping the Elderly: The Complementary Roles of Informal Networks and Formal Systems*. New York, NY: Guilford.

- Matthews, S.H. (1988), 'Shared Filial Responsibility: The Family as the Primary Caregiver', *Journal of Marriage and the Family*, 50, pp.185-95.
- Medina, B. (2001), *The Filipino Family* (2nd ed.). Quezon City, Philippines: University of the Philippines Press.
- Natividad, J.N. (2000), 'Ageing in the Philippines: An Overview', in D.R. Phillips (ed.), *Ageing in the Asia-Pacific Region: Issues, Policies and Future Trends*. London, United Kingdom: Routledge, pp.267-83.
- Natividad, J.N. and G.T. Cruz (1997), 'Patterns in Living Arrangements and Familial Support for the Elderly in the Philippines', *Asia-Pacific Population Journal*, 12(4), pp.17-34.
- Raschick, M. and B. Ingersoll-Dayton (2004), 'The Costs and Rewards of Caregiving among Aging Spouses and Adult Children', *Family Relations*, 53(3), pp.317-25.
- Schulz, R. and J. Eden (eds.), (2016), *Families Caring for an Aging America*. Washington, DC: The National Academies Press.
- Triantafyllou, J., M. Naiditch, K. Repkova, K. Stiehr, S. Carretero, T. Emilsson, D. Vlantoni (2010), 'Informal Care in the Long-Term Care System', European Overview Paper. Athens/Vienna: Interlinks. <http://interlinks.euro.centre.org> (accessed 21 July 2019).
- Ugargol, A.P. and A. Bailey (2018), 'Family Caregiving for Older Adults: Gendered Roles and Caregiver Burden in Emigrant Households of Kerala, India', *Asian Population Studies*, 14(2), pp.194-210. doi:10.1080/17441730.2017.1412593 (accessed 21 July 2019).
- Walker, A.J., C.C. Pratt, and L. Eddy (1995), 'Informal Caregiving to Aging Family Members: A Critical Review', *Family Relations*, 44, pp.402-11.
- Wongsawang, N., S. Lagampan, P. Lapvongwattana, and B. Bowers (2013) 'Family Caregiving for Dependent Older Adults in Thai Families', *Journal of Nursing Scholarship*, 45(4), pp.336-43. doi.org/10.1111.jnu.12035 (accessed 21 July 2019).

Children of Older Persons

Maria Karlene Shawn I. Cabaraban, Mark Ryan B. Paguirigan, and Grace T. Cruz

The relationship between parents and adult children takes special importance given its primacy in successful ageing (Cheng et al., 2015). In the traditional family system, children serve as a crucial safety net that strengthens older parents' well-being as they face functional declines associated with ageing. This explains the practice of filial piety, under which children take on caregiving responsibilities for their ageing parents out of a moral obligation to do so (Hashimoto and Ikels, 2006). Despite recent demographic trends that have paved the way for the gradual decline of traditional values of filial piety, the reciprocal relationship between parent and child remains ubiquitous in most, if not all, Asian countries (Cheng et al., 2015). In this respect, the quality of the relationship between parent and child is an important predictor of their psychological well-being (Umberson, 1992).

A growing body of knowledge places social support networks within the broader framework of successful ageing. Golden, Conroy, and Lawlor (2009) suggested that social support networks foster amongst older persons (OPs) more active participation in social events and exchanges with various members of their community. Conversely, social isolation and loneliness, resulting from inadequate social support, are associated with a higher risk of disability, illness, and mortality (Lubben and Girona, 2003). For instance, in a longitudinal sample of 1,149 older adults in the North Carolina Established Populations for Epidemiologic Studies of the Elderly, Yang (2006) found functional disability to be strongly associated with increased depressive symptoms over 6 years, even after adjusting for the baseline experience of negative life events, chronic conditions, and socio-demographic characteristics. Instrumental assistance from family and friends was not a significant mediator; however, subjective support was a significant buffer against the adverse impacts of disability on depressive symptoms (Yang, 2006).

Since the parent–child dyad creates 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 older adults.

With subsequent gains in age are corresponding losses not only in functionality but also in cognitive functioning. The association between intergenerational relationships and cognitive decline, however, is complex. Several studies have demonstrated that most OPs possess considerable ‘reserve capacity’ (Baltes and Baltes, 1990) which, with sufficient guidance and support, allows them to continue functioning in later life like they did in the earlier stages of life. As such, social structures that abuse external support create increased dependency amongst OPs, which, in turn, hampers cognitive engagement (Baltes and Baltes, 1990). But more recent evidence has shown that social support may work positively to reduce cognitive decline by promoting interpersonal activities and communication (Berkman, 2000). Older adults with adequate family support score higher with respect to cognitive functioning (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 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 exist with regard to research on intergenerational relationships. Shapiro (2004) identified two reasons for this: First, only a handful of studies have assessed intergenerational relations from the perspectives of both generations. Second, no systematic review has been done on the different reports of other dimensions of intergenerational relationships. Fortunately, the multi-actor design of the Longitudinal Study of Aging and Health in the Philippines (LSAHP) provides a nationally representative sample that can be used to examine both the Filipino older parents’ and their adult children’s reports of multiple dimensions of intergenerational solidarity. In this regard, the LSAHP hopes to substantially contribute to the understanding of parent–child dyads in the Philippines.

This chapter presents LSAHP findings on the adult children by the OPs’ sex and age. It aims to describe the parent–child dyad from the adult children’s perspective to allow for a better understanding of the nature of the parent–child relationship,

support provision, and expectations regarding filial piety. Of the 5,985 OP respondents, 60% had adult children interviewed or a total of 3,573 adult child respondents. The adult child questionnaire was administered mainly to any co-resident adult child identified by the OP respondent. In the absence of a co-resident child, non-co-resident children living next door or within the province were selected for interview. Before the OP selected the adult child respondent, the OP was first instructed to identify his/her primary or potential caregiver. Children who are caregivers of the OP respondents were interviewed using the caregiver, and not the child, questionnaire, explaining the higher number of caregivers compared to children who were interviewed. Like the caregivers, we limited the adult children identified by the OP respondents to those who are 18 years old and above. Given the study design, the sample of OPs' adult children covered in this study is not representative of all children of OPs.

Profile of OPs' Adult Children

Table 13.1 shows the profile of the interviewed adult children of OP respondents. Males slightly outnumber the females (53% vs 47%). A higher proportion of male OPs have female adult children, whereas more female OPs have male adult children.

The adult children are in early middle age, with a mean age of 37. More female OPs have older adult children relative to their male counterparts (39 years vs 35 years, respectively). As expected, as the OP respondents become older, the mean age of their adult children increases.

There is a considerable variation in marital status, with more than half (53%) of OPs having children who are currently married; the level increases with the OPs' age, from 45% amongst those in their 60s to 71% amongst those aged 80 and over. About 18% of the adult children are cohabiting, and a slightly higher proportion have never been married (21%). More male OPs have children who never married (28% vs 16%).

The education level, type of residence, and work status of the adult children vary by the age and sex of the OPs. The adult children exhibit higher educational attainment relative to their ageing parents. Half of the children reached the high school level (50%) and nearly a fifth (18%) reached college or higher; the corresponding figures for their OP parents are 19% and 8%, respectively (see Chapter 3). Nearly two in three (64%) adult children reside in rural areas, and the majority (65%) are currently working.

Table 13.1. Characteristics of Children

Characteristics of Children	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Age						
Below 20	2.2	0.7	1.8	0.7	0.0	1.3
20-29	32.8	19.2	35.9	6.3	1.7	24.7
30-39	33.2	33.4	41.1	25.1	8.3	33.3
40-49	24.7	31.2	21.0	48.5	28.7	28.5
50-59	5.8	11.8	0.3	18.0	40.4	9.4
60-69	1.4	3.6	0.0	1.4	19.9	2.7
70-79	0.0	0.2	0.0	0.0	1.0	0.1
Mean age	34.65	39.33	32.73	42.91	51.77	37.44
Sex						
Male	46.9	57.5	53.9	50.9	54.2	53.2
Female	53.2	42.5	46.1	49.1	45.8	46.8
Marital status						
Never married	28.4	15.7	25.8	12.6	10.8	20.8
Currently married	43.3	59.7	45.2	65.6	70.6	53.1
Live-in	21.9	14.9	21.3	13.9	6.1	17.7
Separated/Divorced/Annulled	5.0	6.8	6.9	5.1	3.8	6.1
Widowed	1.4	2.8	0.8	2.9	8.8	2.2
Education						
No schooling/Elementary	32.8	31.3	28.5	37.3	39.1	31.9
High school	45.6	52.7	51.7	46.7	45.9	49.8
College+	21.6	16.1	19.8	16.0	15.0	18.3
Type of residence						
Rural	67.9	61.8	62.8	63.5	73.4	64.2
Urban	32.1	38.2	37.2	36.5	26.6	35.8
% currently working	61.0	68.0	63.8	67.9	67.6	65.2
<i>N</i>	1,447	2,141	2,295	871	423	3,589

Source: Calculated by DRDF using original LSHP data.

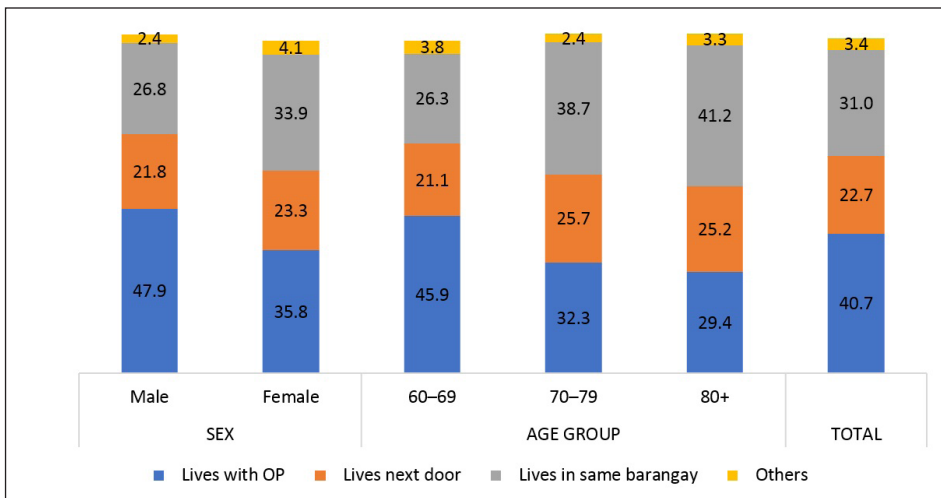
Living Arrangement

Understanding intergenerational living arrangements is important given the complex and often dynamic living arrangements of OPs and their children. The changing directions of dependence over the life cycle is evident in several studies (e.g. Choi, 2003; Crimmins and Ingegneri, 1990; de Jong Gierveld et al., 2012; Wiemers et al., 2016).

Figure 13.1 and Table 13.2 show the distribution of living arrangements of the adult children by the OPs' sex and age. Results corroborate earlier findings showing that OP respondents are most likely to be currently living with an adult child (see Chapter 3).

Co-residence with the OP (41%) is the most common living arrangement of the adult children, more so amongst males than females (48% vs 36%). Almost half of the OPs aged 60–69 (46%) have co-resident children; the corresponding proportions for OPs aged 70–79 and 80+ are 32% and 29%, respectively. The next most common living arrangements of the children of OPs are in the same barangay (31%) and next door (23%). As the age of the OP increases, so does the proportion of children who live next door and in the same barangay. The remaining proportion of the adult children live in the same city/municipality, in the same province, or in a different province. Children of female OPs and those at the older age cohorts are separated for longer periods (in months) from their parents.

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



Source: Calculated by DRDF using original LSAHP data.

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

Relationship of Children to Older Person	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Living arrangement						
Lives with Older Person	47.9	35.8	45.9	32.3	29.4	40.7
Lives next door	21.8	23.3	21.1	25.7	25.2	22.7
Lives in same barangay	26.8	33.9	26.3	38.7	41.2	31.0
Lives in same city/municipality	2.4	4.1	3.8	2.4	3.3	3.4
Lives in same province	1.0	2.4	2.5	0.7	0.9	1.9
Lives in a different province	0.1	0.6	0.5	0.1	0.0	0.4
<i>N</i>	1,447	2,140	2,295	870	422	3,587
Mean number of months child lived separately from Older Person						
	14.36	16.53	11.74	19.03	25.80	15.77
<i>N</i>	738	1,368	1,223	583	301	2,107
Frequency of visits in the past 12 months (visited Older Person)						
Not at all	0.3	0.1	0.0	0.6	0.1	0.2
Everyday	66.3	66.1	64.7	70.0	64.6	66.2
Every few days	20.8	20.4	20.9	19.3	21.5	20.5
Every week	9.0	7.5	9.3	4.6	9.8	8.0
Every month	1.7	3.4	3.0	2.5	2.5	2.8
Every few months	1.5	1.6	1.5	1.9	1.0	1.5
Once a year	0.4	0.7	0.6	0.9	0.2	0.6
On special occasion	0.1	0.0	0.0	0.2	0.0	0.1
As the need arises	0.1	0.1	0.0	0.1	0.3	0.1
Frequency of visits in the past 12 months (visited by Older Person)						
Not at all	5.1	10.1	8.3	3.9	17.2	8.4
Everyday	50.3	55.7	54.4	58.5	42.2	53.8
Every few days	28.1	18.7	22.7	23.4	16.1	22.0
Every week	8.6	7.2	6.6	6.9	13.7	7.7
Every month	3.0	2.7	2.7	2.7	3.4	2.8
Every few months	2.3	2.8	2.3	2.2	4.5	2.6
Once a year	0.4	0.4	0.2	0.9	0.2	0.4
On special occasion	1.9	1.3	2.1	0.6	1.2	1.6
As the need arises	0.4	1.0	0.6	1.0	1.6	0.8
Frequency of talking/chatting with Older Person (through phone, FB, etc.) in the past month						
Not at all	72.3	62.5	62.7	67.5	76.0	65.9
Everyday	11.6	19.9	16.4	19.6	14.2	17.0
Every few days	8.9	7.4	9.5	6.0	5.3	8.0
Every week	2.5	1.3	2.2	0.8	1.2	1.7
Once	1.0	4.1	4.2	2.0	0.3	3.0
As the need arises	3.7	4.9	5.0	4.1	3.0	4.5
<i>N</i>	738	1,368	1,222	583	301	2,106

Relationship of Children to Older Person	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Type of relationship with Older Person growing up (from birth to age 15)						
Get along well all the time	65.9	65.5	68.3	60.2	62.7	65.7
Get along well most of the time	28.9	29.2	25.7	36.2	32.9	29.0
Get along well sometimes	4.4	5.2	5.5	3.5	4.0	4.8
We don't get along well at all	0.9	0.1	0.6	0.1	0.4	0.5
N	1,446	2,140	2,294	871	423	3,558
Type of relationship with Older Person at present						
Get along well all the time	63.5	61.3	66.5	53.6	56.7	62.2
Get along well most of the time	31.4	33.7	28.9	40.7	37.2	32.7
Get along well sometimes	5.0	5.0	4.6	5.6	5.8	5.0
We don't get along well at all	0.1	0.1	0.0	0.1	0.2	0.1
N	1,443	2,141	2,294	867	422	3,583

FB = Facebook.

Source: Calculated by DRDF using original LSAPH data.

Relationship to the Older Person

One of the most important relationships of adult children is their relationship with their parents (Shapiro, 2004). Parent-child relationships intersect in multiple dimensions and may be defined differently from one person to another. In the context of the ageing process, this relationship is mostly social in nature.

Table 13.2 summarises the dynamics of the relationship between adult children and their ageing parents. Results indicate that the majority (66%) of non-co-resident adult children visited their parents every day in the past 12 months. Parents in their 60s were most likely to be visited daily compared to other age groups. About one in five children visited their ageing parents at least once every few days. About 8% of non-co-resident children pay weekly visits to their parents. In addition, a negligible proportion (0.2%) never visited their parents at all in the past 12 months.

We also looked at the other direction of the exchange – that is, visits made by the OPs to their children. More than half of the adult children had daily visits from the OPs in the past 12 months. Another 22% were visited by their ageing parents every few days. Eight percent were never visited by their ageing parents in the year before the survey. As expected, the proportion of OPs who visited their non-co-resident children daily is lowest amongst the oldest age cohort (80+) at 16%. More male OPs visited their children every few days (28%) compared to female OPs (19%).

We also asked the adult children about their communication with their parents by phone, social networking sites like Facebook, and other social media platforms. Two in every three adult children have not talked or chatted with their parents on the phone or on social media in the past month. Seventeen percent of children communicated with their parents daily, more so with female OPs (20%) compared to male OPs (12%). A much lower proportion of adult children communicated with their parents every few days (8%) or as the need arises (4%). Regardless of the frequency of communication, the proportion of children who actively communicate with their parents is generally lowest amongst those whose parents are aged 80 and over.

Adult child respondents were also asked about the type of relationship they had with their parents while growing up (from birth to age 15) and at present. The children reported similar relationships with their ageing parents while growing up and at present. Generally, they have very good relationships with their parents; only about 5% reported not-so-good or poor relationships. Regardless of the sex of the OPs, two-thirds of the adult child respondents reported favourable relationships with their OP parents from birth to age 15. In terms of age, the children of OPs aged 60–69 reported the highest level of good relations with their parents while they were growing up (68%), compared to 60% for parents in their 70s and 63% for parents aged 80+.

Only 5% of the adult child respondents say that they do not or rarely get along well with their parents. Children of OPs in the youngest cohort are more likely to report congenial relationships with their ageing parents at present compared to those with older parents. For example, 66% of the children of OPs aged 60–69 said they get along well with their parents all the time, compared to 54% and 57% for those whose parents are aged 70–79 and 80+, respectively.

Support Provided by Children

Central to the investigation of older parent–adult child relations is the equivalence and/or asymmetry in exchanges. This reciprocity requires the transfer of time, labour, and financial assets across generations (Silverstein et al., 2002). In the Philippine context, adult children are expected to support and assist their ageing parents. However, certain circumstances allow older parents to continue helping their children in one way or another. The LSAHP 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 their parents. Results show that about two in three (64%) adult children financially supported their parents in the month before the interview. Female OPs received a slightly higher level of financial support from their children relative to male OPs (66% vs 62%, respectively). Amongst those who financially supported their ageing parents in the month before the survey, only a fifth (21%) did so every month. Regular monthly support was higher amongst the youngest cohort (60–69) compared to the other older cohorts. Those who financially supported their parents every month gave a median monthly amount of ₱500.00.

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

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	61.6	65.9	64.4	63.8	63.7	64.2
<i>N</i>	1,443	2,140	2,293	867	423	3,583
% who provide financial support to Older Person every month	20.4	22.0	23.2	17.2	19.7	21.3
<i>N</i>	889	1,411	1,478	553	268	2,299
Median monthly financial support given to Older Person (pesos)	1000.00	500.00	500.00	1000.00	1000.00	500.00
<i>N</i>	139	281	277	90	53	420
Financial support to Older Person provided by siblings						
All siblings provide	26.5	21.9	25.7	21.6	17.7	23.7
Some siblings provide	69.4	71.5	68.7	74.1	73.9	70.6
I alone provide help	2.7	3.5	2.7	3.5	5.0	3.2
I am an only child	1.5	3.2	2.9	0.8	3.4	2.5
<i>N</i>	1,444	2,138	2,291	867	422	3,580
Other forms of support provided to Older Person in the past 12 months						
None	4.9	1.8	3.0	3.8	1.8	3.0
Material support	57.9	69.2	61.1	72.0	68.7	64.6
Help in household chores	34.5	38.6	40.2	31.4	30.3	36.9
Help in transportation	1.9	5.3	3.6	3.8	5.8	3.9
Manage financial transactions	2.9	2.2	2.0	3.0	4.2	2.5
Manage business	0.7	1.3	1.2	1.1	0.3	1.0
Personal care	41.8	43.5	37.8	47.8	60.4	42.9
Emotional support	73.3	76.0	72.6	79.4	78.1	74.9
Others (spiritual support; company during visits to the doctor, etc.)	0.3	0.1	0.2	0.1	0.1	0.2
<i>N</i>	2,411	3,574	3,760	1,552	673	5,985

Source: Calculated by DRDF using original LSAHP data.

Providing financial support to an ageing parent seems to be the shared responsibility of all siblings. The adult children were asked if their siblings also financially support their parents; 24% reported that all siblings do, while 71% said only some siblings do. An insignificant proportion (3%) said they are the lone providers of financial help to the OPs. Two percent of the respondents also said they have no siblings and are therefore the only ones financially supporting their ageing parents. The proportion who said that all siblings support their parents is higher amongst children of older males than of older females, and the level declines monotonically with the OPs' advancing age. The proportion who reported other arrangements (i.e. some siblings provide support, or the respondent child alone provides support) is higher amongst children of female OPs than of male OPs, and amongst OPs at the older age cohorts.

The adult child respondents reported a wide range of support when asked about the other forms of support they gave their ageing parents in the past 12 months. These mainly include emotional support, material help, personal care, and help in household chores, in descending order of importance. The level of support varies by the OPs' age and sex for all the aforementioned types of support. Other less common forms of support provided include help in transportation (4%), financial management (2%), and managing the business (1%). About 3% did not give any type of support in the past 12 months.

Across the different forms of support provided by the children of OPs, a gender pattern is obvious, with female OPs generally receiving more support than male OPs. In particular, more children of female OPs (69%) reported giving material support compared to children of male OPs (58%). Likewise, a higher proportion of children helped their mothers in household chores (39%) than their fathers (34%). A similar gender pattern is observed in the provision of assistance in transportation.

Assistance in transportation, management in financial transactions, and personal care increases with the OPs' age. The proportion of children who assist their older parents in household chores is highest amongst the youngest age cohort (60–69) at 40%, compared to 31% and 30% for those in their 70s and 80+, respectively. Other forms of support that showed age differentials do not have a clear age pattern. In the case of material and emotional support, the level of support is highest amongst OPs in their 70s.

More male than female OPs did not receive any form of support from the children interviewed (5% vs 2%, respectively). There were no observed differences by age.

Support Provided by Older Persons

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

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

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	44.5	37.7	46.5	31.9	25.3	40.4
<i>N</i>	1,443	2,138	2,292	867	422	3,581
% who received financial support from Older Person every month	8.8	9.8	10.1	8.2	4.7	9.4
<i>N</i>	643	806	1,065	277	107	1,449
Median monthly financial support received from Older Person (pesos)	500.00	500.00	500.00	500.00	2000.00	500.00
<i>N</i>	57	55	86	19	6	112
Other forms of support received from Older Person in the past 12 months						
None	7.2	7.8	3.8	9.9	23.4	7.6
Material support	48.6	42.0	51.2	38.9	21.0	44.7
Help in household chores	17.2	13.7	18.7	9.1	7.7	15.1
Help in transportation	0.5	0.6	0.6	0.6	0.2	0.6
Manage financial transactions	1.3	1.6	1.7	1.5	0.1	1.5
Manage business	0.7	0.6	0.3	0.9	2.2	0.7
Personal care	23.5	17.8	22.7	17.6	11.3	20.1
Emotional support	70.6	76.1	75.8	73.5	64.2	73.9
Child care	29.8	25.9	28.7	28.8	18.2	27.5
Others (spiritual support, etc.)	0.0	0.1	0.1	0.0	0.0	0.1
<i>N</i>	1,443	2,138	2,292	867	422	3,581

Source: Calculated by DRDF using original LSAHP data.

Two in five children received financial support from their parents in the month before the interview, whereas 64% of OPs received financial support from their children. More male than female OPs provided financial support to their adult children (44% vs 38%). Such support decreases as the OPs' age increases. Almost a tenth (9%) of

adult children received financial support from their parents every month. The median monthly financial support received by the OP respondents was PhP500.00, which is the same as the amount they give.

Other than financial support, adult children also received other forms of support from the OPs in the past 12 months. These include emotional support (74%), material support (45%), childcare (28%), personal care (20%), and help in household chores (15%). Except for emotional support, a higher proportion of male OPs tend to provide these salient forms of non-financial support to their adult children. The proportion of children who received these four types of support decreases dramatically as the OPs' age increases. This result reflects the decline in the OPs' capacity to support their adult children, who are already old enough and may need lesser support from their ageing parents. In fact, adult children themselves may be receiving support from their own children.

The proportion of OPs who do not support their adult children (8%) is much higher than the proportion of adult children who do not support their parents (3%).

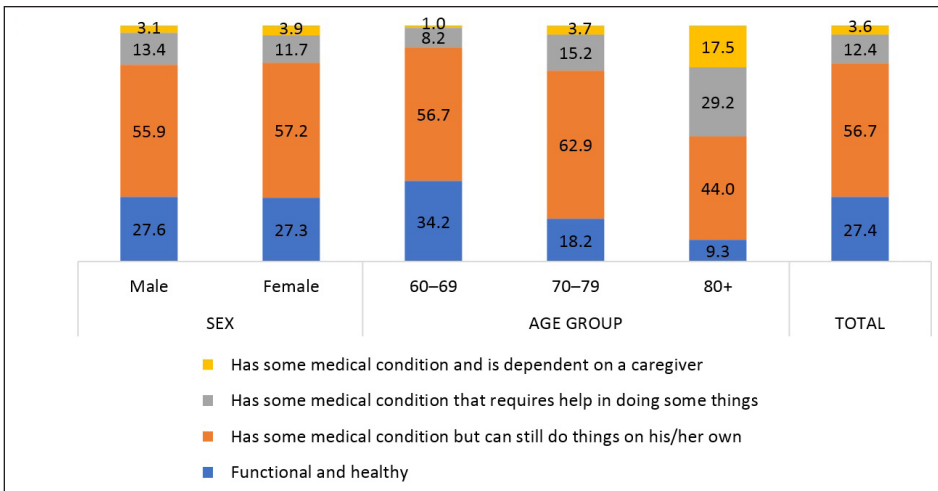
Functional Difficulties and Caregiving

When the adult children were asked to describe the functional abilities of their parents, the majority reported that their parents are still functional, although the perception differs by the parents' age. About a quarter (27%) of the adult children said their parents are still functional and healthy, and more than half (57%) assessed their parents as capable of doing things on their own despite having some medical conditions (Figure 13.2).

Findings also show declining health and functioning with advancing age. The proportion of children who claimed their parents are functional and healthy decreases from 34% amongst those with parents aged 60–69 to 9% amongst those with parents aged 80+. These corroborate the findings in Chapters 4 and 5, showing increasing proportions of OPs with poorer health status and functioning health with age.

For the 16% of OPs who are perceived as requiring help in doing some things or who are dependent on a caregiver, we asked their adult children who mainly provide the OPs with assistance. Findings show that care for OPs is chiefly a family affair. About 62% of the adult children (self, sister, brother) assist their parents to a great degree.

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



Source: Calculated by DRDF using original LSAHP data.

About 1 in every 10 (12%) said that other family members are the main providers of assistance (Table 13.5). About 2% of the OPs are assisted by their grandchildren, and less than 1% are assisted by paid help. Gender differences are evident from the interviews, with the older males most likely to be taken care of by their wives (45%) and none of the older females being taken care of by their husbands. The bulk of care for older females is covered by their daughters (43%). More of the sisters of the adult child respondents were reported to take care of their mothers (43%) than their fathers (22%).

The level of caregiving varies with the age of the OPs. For example, the proportion of older women who take care of their husbands declines substantially as the OPs' age reaches the 80s. This is expected given the decline in health and functioning with age. On the other hand, the level of caregiving provided by grandchildren, other family members, and paid help increases with advancing age.

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

Health Status	SEX		AGE GROUP			TOTAL
	Male	Female	60-69	70-79	80+	
Health status of Older Person						
Functional and healthy	27.6	27.3	34.2	18.2	9.3	27.4
Has some medical condition but can still do things on his/her own	55.9	57.2	56.7	62.9	44.0	56.7
Has some medical condition that requires help in doing some things	13.4	11.7	8.2	15.2	29.2	12.4
Has some medical condition and is dependent on a caregiver	3.1	3.9	1.0	3.7	17.5	3.6
<i>N</i>	1,443	2,137	2,292	868	421	3,581
Person who mainly provides assistance to Older Person						
Mainly self	12.4	24.1	17.1	33.8	9.3	19.2
Mother	45.3	0.0	23.7	24.1	9.4	18.9
Sister	22.2	42.6	31.6	23.2	45.8	34.1
Brother	6.4	9.4	9.8	4.6	9.4	8.2
My children	0.6	3.6	0.8	1.2	4.9	2.4
Other family members	5.8	15.7	8.0	9.2	17.2	11.5
Paid help	0.2	1.5	0.6	0.3	1.5	0.8
Others (daughter-in-law, etc.)	7.2	3.3	8.4	3.6	2.4	4.9
<i>N</i>	237	332	210	164	198	572

Source: Calculated by DRDF using original LSAHP data.

Cognitive Decline of OPs

We also 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 (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 study, we asked the adult child respondents 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 Perception of Children on the Cognitive Decline of Older Persons by Sex and Age of Older Person

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	18.3	21.6	14.6	22.4	46.7	20.3
Remembering things that have happened recently	11.9	22.5	12.3	21.2	45.0	18.3
Recalling conversations a few days later	12.1	22.9	13.3	20.8	42.2	18.5
Remembering [his/her] address and telephone number	8.5	17.8	9.0	17.1	35.2	14.0
Remembering what day and month it is	16.6	22.1	12.4	23.6	53.0	19.9
Remembering where things are usually kept	24.9	33.8	24.6	33.7	53.8	30.3
Remembering where to find things which have been put in a different place from usual	28.0	36.4	27.5	37.0	54.4	33.0
Knowing how to work familiar machines around the house	10.9	18.2	11.1	19.5	29.2	15.3
Learning to use a new gadget or machine around house	11.9	16.5	10.0	22.2	24.4	14.6
Learning new things in general	16.7	22.9	13.9	27.6	41.3	20.4
Following a story in a book or on TV	8.2	17.3	9.1	16.6	31.9	13.6
Making decisions on everyday matters	11.7	13.9	7.9	16.1	34.7	13.0
Handling money for shopping	5.1	12.7	4.7	14.4	26.6	9.7
Handling financial matters; for example, the pension, or dealing with the bank	5.2	13.2	5.2	14.2	27.7	10.0
Handling other everyday arithmetic problems	9.1	18.7	9.0	21.5	33.3	14.9
Using his/her intelligence to understand what's going on and to reason things through	9.7	16.7	7.9	19.2	35.8	13.9
N	1,443	2,134	2,292	867	418	3,577

Source: Calculated by DRDF using original LSAHP data.

Table 13.6 (e.g. 'Compared with 2 years 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?'). In this section, we present the results for those who said their parents' memory had worsened.

Based on the adult children's assessment, older Filipinos appear to struggle the least in managing financial and arithmetic tasks (e.g. handling money for shopping, bank transactions, and daily arithmetic). Regardless of the OPs' sex, spatial memory deteriorated the most in the 2 years before the survey, with about a third of adult children claiming that their parents struggle with remembering where to find things that are put in a different place from the usual (33%) or remembering where things are usually kept (30%). About a fifth (20%) said their parents have difficulty remembering things about family and friends (e.g. occupations, birthdays, and addresses), learning new things in general, or what day and month it is.

For all 16 items asked, the adult children reported that their mothers had suffered greater deterioration in the past 2 years compared to their fathers. As expected, the adult children perceived a decline in their parents' cognitive functioning with advancing age.

Attitudes and Beliefs of Children

The LSHP explored the adult children's perceptions of a range of issues on ageing, such as gender equality, filial concerns, and living arrangements. We asked the adult children of OP respondents if they agreed or disagreed with a set of statements. Table 13.7 presents the results for those who agreed with the statements provided.

The adult children have a universally positive opinion of children's obligation to take care of their ageing parents (99%), regardless of the parents' sex. They also have a strong opinion about parents' responsibility to their children, with 86% 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 are also ubiquitous amongst children of OPs. About 68% of the adult children agree with the traditional division of labour (i.e. men are the breadwinners while women take care of the household). Another 70% agree that co-residence with a daughter as opposed to a son is a more suitable living arrangement for ageing parents. Based on previous studies, this preference for daughters as the co-resident child is shown to be strongly influenced by relational factors, which often takes precedence over gender considerations (Asis et al., 1995; Domingo and Asis, 1995). Daughters, compared to sons, are viewed to be closer to the OPs and are perceived to be more understanding, reliable, available, and caring. This perception of daughters makes them the 'better' caregivers (Domingo and Asis, 1995).

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

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	98.9	98.9	98.8	97.3	98.7
It is acceptable for someone in their 60's or older to fall in love.	46.2	36.4	41.5	37.4	40.3	40.4
It is acceptable for someone in their 60's or older to (re)marry if they find a suitable partner.	39.7	29.5	35.3	31.3	29.0	33.6
It is acceptable for children who looked after their parents to inherit larger portions of their estate when they pass away	42.2	39.3	39.6	42.4	41.5	40.5
<i>It is better for the elderly parent to live with a daughter than with a son.</i>	67.4	71.0	67.3	73.3	73.8	69.6
Men should work for the family, and women should stay home and take care of the household.	68.1	68.7	67.3	70.7	70.4	68.5
It is the parents' duty to do their best for their children even at the expense of their own wellbeing.	88.5	84.0	84.0	89.5	88.2	85.8
N	1,443	2,137	2,292	867	421	3,580

Source: Calculated by DRDF using original LSAHP data.

The adult children are less opinionated on issues relating to inheritance and the romantic involvement of their parents. For example, only 40% agree that it is acceptable for children who looked after their parents to inherit larger portions of their estate when they pass away. The same proportion think it is acceptable for people above the age of 60 to fall in love, and 34% believe it is acceptable for those in their 60s and over to (re)marry if they find a suitable partner.

The adult children's opinions on four of the foregoing issues vary 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. More children of male OPs agree that it is their parents' responsibility to care for their children.

Differences by sex are also noted, except in the matter of inheritance, falling in love at the later stages of life, and traditional division of labour. The fulfilment of filial expectations, i.e. that children are obligated to take care of their ageing parents, decreases monotonically with the age of the OP. The same pattern emerged for (re) marrying if their parents find a suitable partner. On the other hand, children of OPs who are in their 70s and 80s are more likely to say that their parents are better off living with daughters than sons.

Summary, Conclusions, and Recommendations

This chapter overviewed the 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 highlights one of the strengths of the LSAHP: 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 indicate a high proportion of adult children who live with their ageing parents and those who do not live with their parents but reside next door or at least within the vicinity. This result is consistent with the OPs' own report of their current living arrangement as discussed in Chapter 3, which shows that living with children is their most common living arrangement. Co-residence with children decreases with advancing age of the OP; however, adult children still live near their parents' home. Along with the close proximity of adult children to their parents is the high level of intergenerational exchange of support, visits, and communication. 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 web of relationships is multigenerational, going beyond the OPs' children to cover grandchildren. Our findings show that a high proportion of OPs care for their grandchildren; this is reciprocated to a certain extent, although to a much smaller degree. At least 2% of grandchildren are mainly in charge of assisting OPs with difficulties in health and functioning.

There is an observed divide in the support flows not only between generations but also between genders. Adult children are more likely to give financial, material, instrumental, personal care, and emotional support to their mothers than to their fathers. On the other hand, a considerable proportion of adult children continue to receive support from their parents, more likely from their fathers than their mothers. Quite expectedly, this downward flow of support is likely to decrease with the OPs' advancing age. More adult children said they did not receive any support from their mothers than from their fathers. This is expected given the higher economic status of older males, who are more likely to work and derive earnings from work outside the home and from the farm (see Chapter 7).

OPs are mostly perceived by their adult children as capable of independent living even though many of them have some medical conditions. Family caregiving is common amongst the OPs who require assistance, with the male OPs more likely to receive care from their spouses and less so from their children. Female OPs experience a dearth of spousal caregiving and mainly receive assistance from their children and other family members. This gendered pattern of caregiving resonates findings of a similar study by Abalos et al. (2018) which focuses on the provision of assistance amongst Filipino OPs with functional difficulties. An almost universal proportion of adult children expressed positive views regarding filial expectations for adult children to care for and support their ageing parents. This is reflected in the considerable share they have in providing care for their ageing parents, particularly their mothers. Further analysis could uncover some factors that may prevent adult children from assuming caregiving roles, particularly with the study findings indicating that a considerable proportion of OPs suffered 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

- Abalos, J.B., Y. Saito, G.T. Cruz, and H. Booth (2018), 'Who Cares? Provision of Care and Assistance among Older Persons in the Philippines', *Journal of Aging and Health*, 30(10), pp.1–20. doi: 10.1177/0898264318799219 (accessed 24 June 2019).
- Asis, M.M., L. Domingo, J. Knodel, and K. Mehta (1995), 'Living Arrangements in Four Asian Countries: A Comparative Perspective', *Journal of Cross-Cultural Gerontology*, 10(1–2), pp.145–62.
- 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.
- Berkman, L.F. (2000), 'Which Influences Cognitive Function: Living Alone or Being Alone?' *Lancet*, 355(9212), pp.1291–92. [https://doi.org/10.1016/S0140-6736\(00\)02107-3](https://doi.org/10.1016/S0140-6736(00)02107-3) (accessed 24 June 2019).
- 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. <https://doi.org/10.1177/0164027503025004003> (accessed 24 July 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. <https://doi.org/10.1177/0164027590121001> (accessed 24 July 2019).
- Domingo, L.J. and M.M. Asis (1995), 'Living Arrangements and the Flow of Support between Generations in the Philippines', *Journal of Cross-Cultural Gerontology*, 10(1–2), pp.21–51. doi:10.1007/bf00972030 (accessed 24 July 2019).
- de Jong Gierveld, J., P.A. Dykstra, and N. Schenk (2012), 'Living Arrangements, Inter-generational Support Types and Older Adult Loneliness in Eastern and Western Europe', *Demographic Research*, 27(7), pp.167–200. doi: 10.4054/DemRes.2012.27.7 (accessed 24 July 2019).
- 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, & Medicine*, 14(3), pp.280–90. doi:10.1080/13548500902730135 (accessed 24 July 2019).
- 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.
- Ingersoll-Dayton, B. and T.C. Antonucci (1988), 'Reciprocal and Nonreciprocal Social Support: Contrasting Sides of Intimate Relationships', *Journal of Gerontology*, 43(3), S65–S73. doi.org/10.1093/geronj/43.3.S65 (accessed 24 July 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 24 July 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 24 July 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. <https://doi.org/10.1192/bjp.152.2.209> (accessed 24 July 2019).
- Lubben, J. and M. Gironda (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 24 July 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 24 July 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), S3–S13. doi:10.1093/geronb/57.1.s3 (accessed 24 July 2019).
- 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 (accessed 24 July 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 (accessed 24 July 2019).
- 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. Retrieved from <https://www.jstor.org/stable/30040327> (accessed 24 July 2019).
- Zhu, S., J. Hu, and J.T. Effird (2012), 'Role of Social Support in Cognitive Function among Elders', *Journal of Clinical Nursing*, 21, pp.2118–25. doi:10.1111/j.1365-2702.2012.04178.x (accessed 24 July 2019)

Discussion, Conclusions, and Recommendations

Grace T. Cruz, Josefina N. Natividad, and Yasuhiko Saito

The Longitudinal Study of Ageing and Health in the Philippines (LSAHP) is the first multi-actor longitudinal study on ageing in the Philippines, with information gathered from older Filipinos and their caregivers and adult children. The baseline data provide comprehensive information on the health, economic, and overall well-being of a nationally representative sample of older adults aged 60 and older. Successive rounds of the LSAHP will further deepen our understanding of the trajectory of ageing in the country, at the individual and societal levels. The data will be a valuable resource in crafting evidence-based policies and programmes for older persons (OPs).

Whilst the Philippines' population is not yet ageing, worldwide demographic trends indicate it will. The population of older Filipinos is increasing significantly as part of overall population growth. In 2000–2010, Filipinos aged 60 and over had the highest growth rate at 3.2%, compared with those in the age group 15–59 at 2.0%, and children (below 15) at 0.9%. Older Filipinos, recorded at 6 million in 2010, are projected to increase to 12 million by 2025 based on the medium-term assumption of the 2010 census-based population projection by the Philippine Statistics Authority and Inter-Agency Working Group on Population Projections (2016). With the certain rise in the number of older Filipinos in the near future comes the need to prepare now. Amongst the areas that will require judicious planning and preparation are health and general well-being, economic and social support, and, with advanced population ageing, long-term care (LTC). Although the needs of the current cohort of older Filipinos in those areas are being partly met, they are likely, as in many developing countries, mostly borne by family and kin in an informal support network. The formal pillars of support (e.g. short- and long-term healthcare, pension systems) are still under development. Studies such as the LSAHP are a valuable source of data to help guide what, where, and how such systems and structures can be put in place.

The following are some important study findings that can help inform policies and programmes for the current and future cohorts of OPs in the Philippines.

Many older Filipinos are in poor health

The study found that physician-diagnosed illnesses such as hypertension, arthritis, cataracts, diabetes, and angina, amongst others, are prevalent. Their true prevalence is likely to be higher because of undiagnosed cases amongst those with less access to healthcare. Generally, a poor level of oral health is indicated by the low number of natural teeth and lack of dentures. Underweight is highly prevalent whilst obesity is low. Average grip strength is poor and much lower than in comparative older adult samples in Singapore (Malhotra et al., 2016) and Hong Kong (Auyeung, Lee, Leung, Kwok, and Woo, 2014).

A considerable proportion of older Filipinos have some functional difficulty as measured in terms of self-care functional disability (difficulty in performing activities of daily living [ADL]), independent living disability (difficulty in performing independent ADL), and bed disability. Related instruments developed based on the International Classification of Functioning, Disability and Health, such as the Washington Group Short Set of Questions on Disability and the Global Activity Limitation Indicator, confirm the functional health challenges of older Filipinos. Despite the high prevalence of poor health status measured in diverse ways, the highest proportion of older Filipinos assess themselves to be of average health. Of those who do not, more assess themselves to be in poor health than those who report their health status to be better than average.

All the objective and subjective measures of health indicate a worsening health status as age increases. Generally, more females than males exhibit higher prevalence of functional difficulty but have more positive self-rated health.

Many older Filipinos have limited access to healthcare as well as limited awareness of some government health programmes that can benefit them

Evidence indicates significant gaps in health-seeking behaviours of OPs, with about 30% reporting an unmet need for medical attention, mainly because of lack of financial means. About 27% of OPs diagnosed with hypertension and 32% with

diabetes are not taking medications for their condition. Although a government programme provides free medications for hypertension and diabetes at public health facilities such as rural health units, our results indicate that only 31% of hypertensives and 18% of diabetics obtain free medication from health centres all the time. More is to be desired regarding the Department of Health's programme that provides indigent senior citizens free vaccinations against the influenza virus and pneumococcal disease. Study findings show that 41% are aware of the free pneumococcal vaccination programme and 30% know about the flu vaccination programme. Future rounds of the LSAHP can explore further why so few OPs avail themselves of free medications for hypertension and diabetes. The limited awareness of free influenza and pneumococcal vaccines for indigent older Filipinos should also be looked into.

Whilst 80% of older Filipinos say they are covered by health insurance, nearly all of them under PhilHealth, the benefits remain inadequate to cover the full cost of healthcare, especially outpatient care. About half of older Filipinos who sought in-patient care said their children paid for most of the cost of their hospitalisation. Another fourth said they themselves and their spouses paid their medical expenses. Evidently, a high level of out-of-pocket expense remains even with PhilHealth coverage.

That some OPs say they have no health insurance coverage may mean they are unaware of their health insurance privileges or coverage status. Republic Act (RA) No. 9994 or the Expanded Senior Citizens Act of 2010 provides mandatory PhilHealth coverage to all indigent OPs. RA No. 11223 or the Universal Health Care Act guarantees the automatic enrolment of all Filipino citizens in PhilHealth (UHC Law, 2018). RA No. 1096 exempts from value-added tax medications for diabetes, high cholesterol, and hypertension – three of the most common chronic conditions amongst OPs (Train Law, 2017). The law also provides free medical and dental services at all government facilities for all senior citizens. These findings suggest the need for further dissemination of information to OPs on their rights and privileges. Information dissemination may need to be site-specific since privileges vary across local government units, and rich ones tend to provide more privileges to their senior citizen constituents.

Long-term care is mostly in the hands of family and kin

At this juncture of the country's transition towards an ageing society, OPs who require daily care for a debilitating illness or physical condition are mostly under family care as institutional care facilities are not yet widely available (Duaqui, 2013). About 8% of OPs are currently receiving daily care because of a continuing health condition and are thus classified as receiving LTC. LTC for an older family member takes place under the family's auspices, and the main caregiver is most commonly a female family member, either a spouse or a daughter. A significant study finding is the lack of formal caregiving training of almost all current caregivers, with only 5% reporting that they received any training. This finding supports a study on dementia care needs in the country, which showed that most of those caring for a patient with dementia have received no formal training (De la Vega, Cordero, Palapar, Garcia, and Agapito, 2018).

Providing LTC in the home can have repercussions not only for the caregiver but also for the household, as 42% of caregivers reported that they stopped working completely when they became the main caregiver.

Many older Filipinos are poor and highly dependent on their children

More than half of older Filipinos appear to be experiencing economic difficulty as gauged from their self-assessed income sufficiency, with 43% reporting some difficulty in meeting household expenses and 14% considerable difficulty. Poverty seems to have been highly prevalent even when this cohort of OPs were young. About 49% assessed their family's economic status as 'poor' whilst they were growing up (up to age 16).

Economic dependence on children is high, with 30% reporting children as their main source of income, more so amongst women (37%) than men (22%). More than half report transfers from children to be a source of income, along with earnings from own work and pension, amongst others. Children who provide economic support are either living in the country or abroad. Older Filipinos plan to continue relying on their children for financial support, believing that children should support and care for their parents in their old age. Whilst adult children who were interviewed expressed near-universal support (99%) for the idea of children having the obligation to take care of

their ageing parents, it remains to be seen whether the idea translates into practice that can be sustained.

The proportion of OPs receiving financial support from their children dropped noticeably between the 2007 Philippine Study of Aging (85%) (Cruz, Natividad, Gonzales, and Saito, 2016) and the 2018 LSAHP (62%). The proportion of OPs who plan to rely on their children for financial support slightly declined (40% in 2007 vs. 36% in 2018).

Of all OPs, 42% receive income from pension, and only 20% consider pension as their most important source of income, suggesting low levels of pay-outs in general. In the Philippines, pension for private sector employees is from the Social Security System (SSS) which provides lower pension than the Government Service Insurance System (GSIS) for public sector employees. The government has a social pension scheme for indigent OPs, but at PHP500 per month (about US\$10) it is insufficient to cover even the most basic expenses. Nevertheless, by targeting the most economically vulnerable, the social pension provides some economic relief, although a large proportion of poor OPs fail to meet the strict eligibility criteria (Knox-Vydmanov et al., 2017) and thus are not able to access this government support.

Their poor economic situation possibly explains why many OPs continue to work in old age, particularly males, most of whom consider income from work to be their most important source of income. Another probable reason for continuing to work in old age is the lack of eligibility for pension, the OPs having failed to enrol and pay into the system during their younger working years. The 2007 PSOA found that men who continued to work in old age were predominantly working in farming and fishing, mostly in the informal sector, and were not likely to be covered by the SSS (Natividad, Saito, and Cruz, 2014). Although policies have since been instituted to allow informal sector workers to contribute to the SSS to qualify for pension in their older years, such policies were not yet in place when the current cohort of OPs were in their economically productive years (below 60).

Grandparenting is a common role amongst older Filipinos

The study found that the flow of support between older parents and their children is not one way. Grandparenting, where the OP assumes either a supportive or dominant role in the care of one or more grandchildren, is highly prevalent. Amongst the more

common reasons for being the sole caregiver of a grandchild is that the parents of their grandchildren are working outside the household, either in the country or abroad. The caregiver role is performed more by grandmothers than grandfathers. The surrogate parent role of older Filipinos in the face of labour migration, either internal or international, was corroborated by the 2018 National Migration Survey. Of female international migrants with minor children at the time of their move, 37% left their children with their parents, compared with only 4% of male international labour migrants. Male migrants most often leave children with their spouses whilst female migrants leave their children with their parents (Philippine Statistics Authority [PSA] and University of the Philippines Population Institute [UPPI], 2019).

Older Filipinos have high life satisfaction and are socially integrated

One bright spot in the bleak picture of health and economic well-being is that older Filipinos are engaged in active intergenerational exchange of visits, communication, and help with childcare. Beyond their family, OPs have close social ties with friends. The great majority feel they can share problems and worries with family and friends who are willing to listen to them. The social connectedness of OPs may help explain their high level of life satisfaction. They also report the importance of religion in their lives. Religion and spirituality may enhance the outlook on life of OPs and help them overcome hardship. Older workers who experience stress in the workplace and at home turn to prayer and social support to help them cope (De Jose, 2014).

Awareness of programmes for senior citizens is high but levels of use are low

The first law to grant privileges to senior citizens in the Philippines was enacted in 1992. Privileges have been revised and expanded through amendments to RA No. 9994. Many OP respondents are highly aware of the privileges under these laws, mainly in the form of discounts on medicines, transportation, and lodging; and free medical and dental services at public health facilities. However, awareness of their privileges does not automatically translate into use of the privileges. For example, whilst almost all OPs report owning a senior citizen's card, only two in three say they use it to receive discounts on the purchase of medicines and only one in two use it to receive dental services at government health facilities. The system of discounts

benefits the rich, who have the means to purchase items and services that can be discounted, more than the poor, who may lack purchasing power.

There are newer programmes, mainly in the health sector, for which awareness is low and their use even lower. These include free influenza and pneumococcal vaccination for OPs and free antihypertensive and anti-diabetes medications at public health facilities such as health centres.

Policy Recommendations

On Health

Since the passage of the Senior Citizens' Act of 1992 (RA No. 7732), a series of amendments have expanded the privileges of senior citizens. The law implicitly recognises the two main areas of concern of older adults – their health and economic well-being – and directly or indirectly addresses these needs. Both concerns are directly addressed with the use of discounts and, more recently, exemption from the 12% value-added tax. These measures recognise that health problems are likely to be more prevalent in old age as is diminished earning capacity. Discounts are a way to lessen the burden of healthcare costs for older adults, although this privilege has been criticised as being pro-rich.

Other laws have been passed, such as RA No. 9994, which provides integrated health service for OPs. The Universal Health Care Law of 2019 guarantees equitable access to quality and affordable healthcare services for all Filipinos, including older adults. RA No. 11350, passed in July 2019, created the National Commission of Senior Citizens. The commission will ensure the full implementation of laws, policies, and government programmes pertaining to senior citizens and formulate policies to promote and protect the rights and well-being of senior citizens, amongst others. A related law is RA No. 11036 or the Mental Health Law, which seeks to provide affordable and accessible mental health services for Filipinos down to the barangay level. One major programme for economic well-being is the social pension for the indigent elderly, which recognizes the economic needs of the elderly poorest of the poor.

These overlapping policies need to be streamlined and harmonised to create a holistic view of critical issues on ageing and to fashion an integrated policy response. Whilst health and economic well-being are the two critical concerns of the current

cohort of older adults, the policy response so far seems heavily concentrated on health, predominantly on providing curative services and lessening the burden of healthcare cost. These are solutions to existing problems, but policies should also be crafted to promote healthy and active ageing, to lessen the burden of curative care by promoting programmes that will prevent the occurrence of chronic conditions in the first place. Active and healthy ageing is increasingly being adopted as a framework by many ageing societies, as highlighted in the recent G20 Health Ministers' Meeting held in Japan, where active and healthy ageing was a key theme (Asia Health and Wellbeing Initiative [AHWIN], 2019). This concern is also underscored in the World Report on Ageing and Health, which outlines a framework for action to foster healthy ageing built around the new concept of functional ability (World Health Organization [WHO], 2015).

The government is on the right track in investing more in human capital formation, particularly in education and health in the early years, to promote health throughout the life course, including in the older years. Greater attention should be focused on encouraging healthy eating habits; good oral health practices; and a healthy lifestyle though proper diet, exercise, and stress management at all stages of life.

To be able to respond more holistically, the government should consider the increasing number of older Filipinos, rising life expectancy, occurrence of functional disability, and likely rise of chronic conditions that will require LTC.

Government and private efforts for elderly care are in place. RA No. 9994 provides for the establishment of a geriatric ward in every government hospital. Centres specialising in providing medical care for OPs have been established. Foremost is the National Center for Geriatric Health (NCGH), a government facility that provides LTC, palliative care, and respite care to patients, including those with dementia. NCGH provides community-based geriatric health services and training to senior citizens and their families; post-graduate training and short-term courses to medical doctors and allied medical professionals in geriatrics and related fields; programme development and research on ageing-associated diseases; and consultancy and technical advice to geriatric wards, nursing homes, and residential centres for senior citizens (NCGH, n.d.). Members of the Philippine College of Geriatric Medicine, a professional organisation of subspecialists in geriatric medicine, pioneered, established, and currently run the charity outpatient geriatric clinics at the Philippine General Hospital and NCGH (PCGM, n.d.).

Generally, however, little available data show the concrete implementation indicators of the law, such as the number of existing geriatric wards, services, and size of workforce established in hospitals. A few studies, including one on dementia, reveal the lack of dementia facilities, services, and workforce; and of day care and temporary inpatient care for families with a dementia patient (De la Vega, Cordero, Palapar, Garcia, and Agapito, 2018).

The reality of a possible increase in the number of older Filipinos requiring LTC as the population ages must be confronted now by preparing human resources and facilities to provide the needed services. Current family-based, female-dominated home-based LTC may not be sustainable because of falling fertility and smaller family size, participation of women in the labour force, and labour migration, amongst others.

Not everyone can afford institutional care and there will always be families that will opt to provide LTC themselves. Short-term training for informal home-based caregivers is needed, perhaps provided by the Technical Education and Skills Development Authority (TESDA), to improve their caring skills and indirectly improve the quality of life of those they care for. Training will help caregivers cope with the mental, emotional, and physical strain of caring for an elderly loved one. Currently, TESDA courses are seen as providing caregiving skills primarily to those who intend to work abroad.

On Economic Well-being

The high prevalence of economic instability in old age and, consequently, heavy reliance on children for economic support is a common phenomenon in developing countries, which still do not have a formal pillar of economic support in the form of a well-developed, highly subscribed pension system. An integrated holistic response is needed. As with the recommended strategy to achieve healthy and active ageing through interventions earlier on in the life course, improvement of the economic well-being of future cohorts of older Filipinos will require them to actively prepare for ageing by paying into the government pension system during their economically productive years, by actively saving, and by trying to accumulate greater physical wealth or capital (Mapa, Davila, and Albis, 2010). Programmes on financial literacy in the basic education curriculum can instil appreciation for long-term planning and financial preparation for old age.

Women should be encouraged to enter the labour force and contribute to their own pension to lessen their reliance on their children in the future.

Current pension rates should be reviewed to see how the system can be changed to increase the pensions of private sector retirees so they can be independent of their children and other kin.

Other Recommendations

Whilst the notion of strong family ties exists, with co-residence with a child remaining a norm, no studies to date have explored the nature and dynamics of filial piety amongst Filipinos. In Asian cultures such as Japan and the Republic of Korea, which are at an advanced stage of population ageing, the shrinking level of intergenerational support may be attributed to changing attitudes towards filial piety. In Japan (Ogawa, Mason, Maliki, Matsukura, and Nemoto, 2007) and Korea (Harlan, 2014), children no longer deem it necessary to support older parents, whilst parents have lowered their expectations for fear of burdening their children.

The lower proportion of OPs relying on children for financial support from 2007 to 2018 and the finding that a large majority of older Filipinos desire financial independence suggest that we may be going down the same path. In line with this, the state may consider promoting the establishment of more homes for OPs, and not just for the abandoned and destitute, as well as providing incentives for elderly care.

More analysis of the 2018 LSAHP data is needed to further our understanding of the current state of health and well-being of older Filipinos and its determinants. Studies of healthy life expectancy, sarcopenia, falls, and the like should be pursued to better understand the dimensions of health of older people. Validation studies to determine the appropriate cut-off scores for older Filipinos for depression and cognitive functioning need to be undertaken. Analysis is also needed to explore the possible protective effects of social connectedness and active engagement with family and friends – face to face or via technology-mediated means – on health and well-being.

References

- Asia Health and Wellbeing Initiative (AHWIN) (2019), 'AHWIN Forum: Achieving Healthy Aging in Asia'. <https://www.ahwin.org/posts/ahwinforum-achieving-healthyaginginasia> (accessed 13 November 2019).
- Auyeung, T. W., S. W. J. Lee, J. Leung, T. Kwok, and J. Woo (2014), 'Age-associated Decline of Muscle Mass, Grip Strength and Gait Speed: A 4-year Longitudinal Study of 3018 Community-dwelling Older Chinese', *Geriatrics and Gerontology International*, 14(Suppl. 1), pp.76–84.
- Badana, A. N. S. and R. Andel (2018), 'Aging in the Philippines', *The Gerontologist*, 58(2), pp.212–18. doi: 10.1093/geront/gnx203 (accessed 9 November 2019).
- 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. doi: 10.4054/DemRes.2015.32.49 (accessed 9 November 2019).
- Cruz, G. T., J. N. Natividad, M. L. Gonzales, and Y. Saito (2016), *Aging in the Philippines: Findings from the 2007 Philippine Study on Aging*. Quezon City, Philippines: University of the Philippines Population Institute and Demographic Research and Development Foundation.
- De Jose, E. G. (2014), 'Psychological Attributes, Stressors, and Coping of Older Adults Teaching in Selected State Universities in Manila, Philippines'. Paper presented at the International Symposium on Education and Psychology, Meiji University, Tokyo, Japan, 12–14 November.
- De la Vega, S. A., C. Cordero, L. Palapar, A. Garcia, and J. Agapito (2018), 'Mixed Methods Research Revealed the Need for Dementia Services and Human Resource Master Plan in an Aging Philippines', *Journal of Clinical Epidemiology*, 102, pp.115–22. <https://doi.org/10.1016/j.jclinepi.2018.06.010> (accessed 1 November 2019).
- Duaqui, Y. (2013), 'Growing Old Gracefully: A Filipino Family's Grandmother's Story', *Asia-Pacific E-Journal of Health Social Science*, 2, pp.1–2. <https://sites.google.com/site/asiapacificjournalofhss/> (accessed 10 November 2019).
- Esteban, R. C. (2015), 'Thinking About Aging: Experience, Identity and Meaning Among an Elderly Population in the Philippines', *Advances in Aging Research*, 4, pp.133–53. doi:10.4236/aar.2015.45015 (accessed 9 November 2019).
- Government of the Philippines (2010), Expanded Senior Citizens Act of 2010, Republic Act No. 9994.
- Government of the Philippines (2017), Tax Reform for Acceleration and Inclusion (TRAIN) Law of 2017, Republic Act No. 10963.
- Government of the Philippines (2018), Universal Health Care Act of 2018, Republic Act No. 11223.
- 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-filial-piety-weakens/2014/01/20/19769cf2-7b85-11e3-97d3-b9925ce2c57b_story.html (accessed 9 November 2019).

- Knox-Vydmanov, C., D. Horn, and A. Sevilla (2016), *The Philippine Social Pension at Four Years: Insights and Recommendations*. Manila and London: Coalition of Services of the Elderly and HelpAge International.
- Malhotra, R., S. Ang, J. C. Allen, N. C. Tan, T. Østbye, Y. Saito, and A. Chan (2016), 'Normative values of hand grip strength for elderly Singaporeans aged 60 to 89 years: A cross-sectional study', *JAMDA*, 17, pp.864.e1–864.e7. <http://dx.doi.org/10.1016/j.jamda.2016.06.013> (accessed 12 July 2019).
- Mapa, D. S., M. L. Davila, and M. L. F. Albis (2010), 'Getting Old Before Getting Rich: An Analysis of the Economic State of the Elderly in the Philippines'. Paper presented at the 11th National Convention on Statistics, EDSA Shangri-La Hotel, Mandaluyong City, Philippines, 4–5 October 2010.
- National Center for Geriatric Health (n.d.). <https://www.webbline.com/nursing-homes/national-center-for-geriatric-health/> (accessed 9 November 2019).
- Ogawa, N., A. Mason, R. Chawla, and R. Matsukura (2010), 'Japan's Unprecedented Aging and Changing Intergenerational Transfers', in T. Ito and A. Rose (eds.), *The Economic Consequences of Demographic Change in East Asia*, NBER-EASE Volume 19. Chicago: University of Chicago Press, pp.131–60.
- Philippine College of Geriatric Medicine (n.d.). <http://www.philippinegeriatrics.org/> (accessed 10 November 2019).
- Philippine Statistics Authority and Inter-Agency Working Group on Population Projections (2016), 2010 Census-Based National, Regional, and Provincial Population Projections. Quezon City: Philippine Statistics Office.
- Philippine Statistics Authority (PSA) and University of the Philippines Population Institute (UPPI) (2019), 2018 National Migration Survey Report. Quezon City, Philippines: PSA and UPPI.
- World Health Organization (2015), World Report on Ageing and Health. https://apps.who.int/iris/bitstream/handle/10665/186463/9789240694811_eng.pdf?sequence=1 (accessed 13 November 2019).

Annex A: LSAHP Sampling Design and Weights

Erniel B. Barrios and Maria Paz N. Marquez

The 2018 Longitudinal Study on Aging and Health in the Philippines (LSAHP) is a survey with a nationally representative sample of 5,985 respondents aged 60 years and above (referred to as older persons or OPs) living in households. OPs living in institutions such as prisons, convents, seminaries, and the like were excluded from the study. The sample for the LSAHP is designed to produce results representative of the whole country, of urban and rural areas separately, and of the National Capital Region and each major island grouping – Balance Luzon, Visayas, and Mindanao.

The LSAHP is a longitudinal study of a cohort of OPs. The 2018 round provides information on the health status and well-being of older Filipinos. The survey instruments used in 2018 will be used in the follow-up survey in 2020 to facilitate the measurement of various indicators (and outcomes) pertaining to OPs and the corresponding changes over time.

Sample Design and Implementation

The 2018 LSAHP employed a multistage sampling design with provinces as the primary sampling units (PSUs), barangays (villages) as the secondary sampling units (SSUs), and OPs as the ultimate sampling units. The 2015 Census of Population served as the sampling frame for the selection of the PSUs and SSUs.

In the first stage, provinces were stratified into three strata (low, medium, and high proportion) based on the 2018 projected population 60 years and over. The population projection used the 2015 census data. An iterative algorithm was used to determine the stratum boundaries with the objective of minimising the pooled variance of the estimated total of indicators from the three strata.

The stratum with low proportion of OPs account for 55.21% of the provinces, the medium stratum accounts for 29.17% of the provinces, while the stratum with high proportion of OPs comprises 15.63% of the provinces.

Table A1. List of Sample Areas and their Corresponding Number of Sample Barangays and Sample Size

Area (Region and City/ Province)	No. of Barangays	No. of Older Person Respondents	
		Visited	Interviewed
NCR	17	647	586
Pasig	10	382	349
Muntinlupa	7	265	237
BALANCE LUZON	51	1,945	1,836
Bulacan	23	875	834
Rizal	17	653	607
Occidental Mindoro	5	190	179
Oriental Mindoro	6	227	216
VISAYAS	50	1,875	1,776
Eastern Samar	20	755	708
Samar (Western Samar)	30	1,120	1,068
MINDANAO	49	1,868	1,787
Davao Occidental	10	380	370
Dinagat Islands	7	265	261
Misamis Occidental	32	1,223	1,156
TOTAL	167	6,335	5,985

Source: Calculated by DRDF using original LSAHP data.

From each stratum, provinces (or city/municipality in the case of NCR¹) were selected using systematic sampling to induce implicit stratification amongst the major strata (NCR, Balance Luzon, Visayas, and Mindanao). The number of sample provinces/cities is proportional to the number of provinces/cities in the low, medium or high strata based on the density of OPs in NCR, Balance Luzon, Visayas and Mindanao, resulting in a self-weighting sample of provinces and cities.

¹ Metropolitan Manila, officially the National Capital Region, is composed of 16 cities and one municipality.

The selection of provinces (or cities in the case of NCR) resulted in a sample consisting of two cities in NCR and nine provinces distributed proportionally across Balance Luzon, Visayas, and Mindanao. Table A1 shows the list of these sample provinces/cities.

In the second stage, sample barangays were selected for each of the sample provinces/cities. The barangays were selected using probability proportional to size, with the proportion of OPs as the size measure. Barangays were further selected with induced implicit stratification for rural and urban areas.

In each sample barangay, a list of all OPs residing in the barangay was obtained from the barangay's Office for Senior Citizens Affairs. This list was validated with a relisting of all resident OPs in the barangay. This list which was sent to the central office for sampling served as the sampling frame from where the sample eligible respondents (ERs) for each barangay were drawn.

In the case of some very large sample barangays, we limited the listing to an enumeration area (EA). The EA should cover a minimum of 3 times the maximum sample size for the sample barangay. To facilitate data collection, only one EA was randomly selected per barangay. The EA was selected based on the location and density of OPs.

Sample Size

The initial target of the study was to cover 6,000 respondents from 167 barangays. The 167 barangays were proportionally distributed across 11 provinces/cities selected in the first stage (PSUs). However, to give allowance for possible attrition, nonresponse, and refusals based on the 2007 PSOA nonresponse rate, the survey targeted a sample of 6,335 OPs.

In drawing the sampling frame, we limited the OPs to one per household. In the case of more than one OP per household, we randomly selected one OP per household to be included in the sampling frame. We then organised the sampling frame by three age groups: 60–69, 70–79, and 80 and above. The sample was selected proportionally to the size of the age group based on the sampling frame for each barangay.

To ensure a sufficient number of respondents in the older age groups in the succeeding rounds of the survey, we oversampled the number of respondents in the age groups 70–79 and 80 and over by a factor of 2 and 3, respectively.

After determining the sample size per age group for each barangay, the ultimate sampling units (the units selected at the last stage in a multistage sample design) or the OP respondents were drawn using systematic random sampling from each of the three age groups based on the listing of OPs (sampling frame). The samples were centrally selected; this means that the list of OPs in the barangay was forwarded to the central office where the sample respondents were drawn. The list of selected sample respondents was then returned to the field. The sampling procedure does not allow for a replacement sample because the sample already considers the expected nonresponse per barangay.

Table A1 summarises the final distribution of the number of barangays and the number of respondents visited and interviewed for each sample area. In all, 6,335 OPs were visited; amongst them, 5,985 completed interviews for a completion rate of 94.5%.

Sampling Weights

To ensure that the results of the study will be representative at the national level and for urban–rural areas, sampling weights are required for analysis. As mentioned earlier, the samples were selected in three stages: (1) selection of provinces (PSUs), (2) selection of barangays (SSUs), and (3) selection of ERs or OPs (ultimate sampling units [USUs]). The selection of PSUs was done with stratification and proportional allocation; hence, the sample PSUs are self-weighting. The selection of USUs was done using systematic sampling, so ERs have equal weights within the sample barangay. The selection of barangays, however, was done with probability proportional to the estimated total number of OPs based on the 2015 census. Thus, the sampling weights will vary only across sample barangays. The basic weights are the inverse of inclusion probabilities of the sample barangays:

$$W_i = \frac{1}{\pi_i}$$

where $\pi_i = P[\text{barangay } i \text{ is included in the sample of 167 barangays}]$,
 $i = 1, 2, \dots, 167$.

Weights were then adjusted as a result of actual sample selection. Two sets of weights are provided in the data. The first set was adjusted to account for the differences between frame information and the actual characteristics of the sample barangays (W_i^1). The second set of weights (W_i^2) further accounts for differences between frame information and the actual characteristics of the sample barangays with disaggregation by implicit strata – that is, by the rural–urban classification of barangays and by the age group (60–69, 70–79, and 80 and over) of OPs. The first set of weights (Weight 1) is the adjusted design weights while the second set of weights (Weight 2) is the adjusted design weights with rural–urban breakdown (based on implicit stratification into rural–urban areas).

Weight 1

To compute for W_i^1 , the sample size was corrected first. The corrected sample size accounts for the oversampling of age groups 70–79 and 80 and above. Thus, the corrected sample size is computed as follows:

$$Adj\ n_i = n_{i1} + \frac{n_{i2}}{2} + \frac{n_{i3}}{3}$$

where n_{i1} is the actual sample size in barangay i amongst 60–69-year-old OPs,

n_{i2} is the actual sample size in barangay i amongst 70–79-year-old OPs, and

n_{i3} is the actual sample size in barangay i amongst 80-year-old and over OPs.

The original weights (W_i) were then adjusted as follows:

$$Adj\ W_i = W_i * \frac{OP_i}{FOP_i} * \frac{n_i}{Adj\ n_i}$$

where OP_i is the estimated total number of OPs in the barangay at the time of the survey,

FOP_i is the total number of OPs in the barangay based on the frame (2015 census),

n_i is the target sample size in barangay i , and

$Adj\ n_i$ is the corrected sample size (actual) after oversampling is considered.

Since the frame was based on the 2015 census, the weights were adjusted further to sum up to the projected OPs in 2018, as follows:

$$Adj W_i^{OP} = Adj W_i * \frac{Projected\ OP\ in\ 2018}{\sum_i Adj W_i}$$

The weights from $Adj W_i^{OP}$ are at the barangay level; hence, respondent-level weight was computed as follows:

$$W_i^1 = \frac{Adj W_i^{OP}}{Actual\ n_i}$$

where $Actual\ n_i$ is the actual number of sample OPs enumerated in barangay i .

W_i^1 can be used to estimate incidence amongst the OPs. The weights can also be standardised to sum up to the total sample size, which will facilitate the interpretation of descriptive statistics as well as modelling.

Weight 2

Another set of weights was computed to consider disaggregated estimates from implicit stratification in terms of rural–urban areas and by age group (60–69, 70–79, and 80 and over). W_{ij}^{2R} is defined as the weight amongst respondents of age group j (1 for 60–69, 2 for 70–79, 3 for 80 and over) in barangay i classified as R (Rural or Urban). In computing W_{ij}^{2R} , the original weight was distributed into the age groups based on the actual number of ERs in the age group as follows:

$$AdjW_{ij}^R = W_i * \frac{OP_{ij}^R}{OP_i^R}$$

where W_i is the original weight,

OP_{ij}^R is the actual number of OPs interviewed from age group j in barangay i classified as R , and

OP_i^R is the total number of OPs interviewed in barangay i classified as R .

We further adjusted the weights to conform to the projection of total OPs in each age group by rural–urban residence as follows:

$$AdjW_{ij}^{2R} = AdjW_{ij}^R * \frac{Projected\ OP\ in\ 2018_j^R}{\sum_i Adj\ W_{ij}}$$

$AdjW_{ij}^{2R}$ totals to projected rural–urban OPs by age group (60–69, 70–79, and 80 and over).

The weights from $AdjW_{ij}^{2R}$ are at the barangay level; hence, respondent-level weights were computed as follows:

$$W_{ij}^2 = \frac{AdjW_{ij}^{2R}}{Actual\ n_{ij}}$$

These weights can be standardised to sum up to the total sample size to facilitate the interpretation of descriptive statistics as well as modelling.

Annex B: Characteristics of Filipino Older Persons with Proxy Respondents

Christian Joy P. Cruz and Grace T. Cruz

In ageing research, the inclusion of proxy interviews is important in addressing the methodological challenges of acquiring a representative sample of the study population. Proxy interviews help reach institutionalised populations and individuals with physical and cognitive impairments, thus increasing the sample size and improving the representativeness of the study population (Weir et al., 2011). However, the inclusion of proxy respondents may create another challenge, as the lower accuracy of proxy responses can lead to biased estimates (Oksuzyan et al., 2019). Research findings tend to support the use of proxy ratings amongst older adults in many but not all areas when self-reports are not feasible (Nuemann et al., 2015).

The LSAHP employed two types of screening to determine if an OP could be interviewed or if he or she would require a proxy. For the first screening, the study required a proxy if the potential OP respondent was in any of the following situations: (i) the OP has been hospitalised, sick, or incapacitated; (ii) the OP has difficulty hearing; (iii) the OP has difficulty speaking; and (iv) the OP has poor cognitive or psychological condition (e.g. memory loss and confusion). All the OPs who passed the first screening were further subjected to a second-level screening: a cognitive assessment using the Short Portable Mental Status Questionnaire (SPMSQ) (Pfeiffer, 1975). The SPMSQ is a set of 10 questions that is commonly used for cognitive assessment, particularly for OPs. As mentioned in Chapter 2, the SPMSQ has not yet been validated in the Philippines. Thus, we employed the criteria proposed and used by Pfeiffer (1975) for determining who amongst our initial sample were not cognitively able to be interviewed for the study. According to Pfeiffer, those

who have 0–2 errors in the test are classified as having normal mental functioning, those with 3–4 errors have mild cognitive impairment, those with 5–7 errors have moderate cognitive impairment, and those with 8 or more errors have severe cognitive impairment. Pfeiffer factored in the respondent's educational attainment in determining his or her final cognitive level score. Specifically, those with lower educational attainment (grade school education or less) are allowed one more error, and those with at least a high school education are allowed one less error. When these scoring guidelines are applied to the LSAHP, an OP with an elementary education or less should have no more than five incorrect answers to be eligible for interview. An OP with a high school education should have no more than four incorrect answers, while an OP with a college education or higher should have no more than three incorrect answers to be eligible for interview.

In this section, we describe the characteristics of older Filipinos who required proxy respondents after the first and second screenings and compare them with the characteristics of their counterparts who did not need proxies. The reasons they were screened out during the first screening are also discussed. As presented in Chapter 2, the proxy interviews had a total of 776 respondents – 475 from the first screening and 301 from the second screening. Proxy interviews constitute 13% of the total unweighted sample. It should also be noted that the data collected from proxy interviews are not comparable with that of the regular interviews because the former skipped questions that are not factual. Examples of missed data for proxy interviews are mental health questions and attitudinal questions.

Results show that OPs who required a proxy during the survey are a select group with significantly different characteristics from those who did not need a proxy to answer the survey questions. Differences in the socio-demographic characteristics between these two groups are apparent, except in religion (Table B1). Those who are older, female, widowed, living in rural areas, less educated, and not working are more likely to need a proxy. Those with a proxy have a mean age of 81 compared to 72 for those who had no need for a proxy. In terms of marital status, a significantly higher proportion of OPs with a proxy are widowed (68% vs 48%).

Older Filipinos exhibit a relatively low educational profile, with elementary education as the modal educational attainment (Chapter 2). The OPs with a proxy have an even poorer educational profile, with nearly four in five (78%) having at most an elementary education compared to 65% of OPs with no proxy.

Table B1. Profile of Respondents by Proxy Status and Screening Type (Unweighted Data)

Characteristics of Older Persons	No. of Older Person Respondents						ALL
	Without Proxy	With Proxy	Sig	Type of Screen (With Proxy)		Sig	
				First Screen	Second Screen		
Age							
60-69	39.9	9.7		9.1	10.6		35.9
70-79	40.7	28.4	***	27.7	29.6	n.s.	39.1
80+	19.4	61.9		63.2	59.8		24.9
Mean age	71.88	80.72	***	81.04	80.19	n.s.	73.03
Sex							
Male	36.6	32.8	*	34.2	30.6	n.s.	36.1
Female	63.4	67.2		65.8	69.4		63.9
Marital status							
Single	3.5	3.2	***	3.0	3.7		3.2
Married	38.6	23.2		22.2	24.9		23.3
Living in Separated/Divorced/ Annulled	4.1	2.7		2.3	3.3	n.s.	2.7
Widowed	5.4	3.1		3.8	2.0		3.1
	48.5	67.7		68.7	66.1		67.7
Religion							
Roman Catholic	79.0	81.8		82.7	80.4	n.s.	79.4
Non-Roman Catholic	21.0	18.2	n.s.	17.3	19.6		20.6
Education							
No schooling	3.5	17.0		10.0	27.9		5.3
Elementary	61.7	61.4	***	65.8	54.5	***	61.6
High school	24.6	15.0		17.2	11.6		23.4
College+	10.2	6.6		7.0	6.0		9.7
Work Status							
Working	35.6	7.0	***	6.1	8.3	n.s.	31.9
Not working	64.4	93.0		93.9	91.7		68.1

Characteristics of Older Persons	No. of Older Person Respondents						ALL
	Without Proxy	With Proxy	Sig	Type of Screen (With Proxy)		Sig	
				First Screen	Second Screen		
Type of residence							
Urban	44.1	38.1	**	37.2	39.5	n.s.	43.3
Rural	55.9	61.9		62.8	60.5		56.7
Living arrangement							
Living alone	12.9	15.0		15.4	14.3		13.2
Living with spouse only	9.5	7.0		6.3	8.0		9.2
Living children	59.6	62.7	*	64.7	59.5	n.s.	60.0
Other types of living arrangement	17.9	15.4		13.5	18.3		17.6
<i>N</i>	5,209	776		475	301		5,985

* $p < .05$. ** $p < .01$. *** $p < .001$. n.s. = not significant.

Source: Calculated by DRDF using original LSAHP data.

Seventeen percent of those requiring a proxy had no formal schooling compared to 4% of those without a proxy. Given their education and age disparity, it is not surprising that those requiring a proxy are less likely to be working (7% vs 36%).

We also compared the two types of OPs who required a proxy – that is, those disqualified for interview in the first two screenings. Statistical tests show they are no different in terms of the socio-demographic variables including age, sex, marital status, religion, work status, and type of residence. An exception is education; those who did not pass the second screening, or the cognitive assessment are less educated compared to those who did not pass the first screening. About 28% of the former never attended formal school compared to 10% of the latter.

The reasons respondents were not interviewed during the first screening are presented in Table B2. Hearing difficulty (42%) and poor cognitive or psychological condition (32%) are the top reasons the OPs needed a proxy during the interview. Both reasons were more common amongst females and those in the oldest age group. Other reasons for requiring a proxy are hospitalisation, sickness, or incapacity (19%) and difficulty in speaking (8%). These two reasons were more commonly reported amongst the males and the younger cohort (60–69).

Table B2. Reasons for Having a Proxy (First Screening) by Background Characteristics (Unweighted Data)

Characteristics of Older Persons	No. of Older Person Respondents						ALL
	With- out Proxy	With Proxy	Sig	Type of Screen (With Proxy)		Sig	
				First Screen	Second Screen		
Age							
60-69	39.9	9.7		9.1	10.6		35.9
70-79	40.7	28.4	***	27.7	29.6	n.s.	39.1
80+	19.4	61.9		63.2	59.8		24.9
Mean age	71.88	80.72	***	81.04	80.19	n.s.	73.03
Sex							
Male	36.6	32.8	*	34.2	30.6	n.s.	36.1
Female	63.4	67.2		65.8	69.4		63.9
Marital status							
Single	3.5	3.2		3.0	3.7		3.2
Married	38.6	23.2		22.2	24.9		23.3
Living in	4.1	2.7	***	2.3	3.3	n.s.	2.7
Separated/Divorced/ Annulled	5.4	3.1		3.8	2.0		3.1
Widowed	48.5	67.7		68.7	66.1		67.7
Religion							
Roman Catholic	79.0	81.8	n.s.	82.7	80.4	n.s.	79.4
Non-Roman Catholic	21.0	18.2		17.3	19.6		20.6
Education							
No schooling	3.5	17.0		10.0	27.9		5.3
Elementary	61.7	61.4	***	65.8	54.5	***	61.6
High school	24.6	15.0		17.2	11.6		23.4
College+	10.2	6.6		7.0	6.0		9.7
Work Status							
Working	35.6	7.0	***	6.1	8.3	n.s.	31.9
Not working	64.4	93.0		93.9	91.7		68.1

Characteristics of Older Persons	No. of Older Person Respondents						ALL
	With-out Proxy	With Proxy	Sig	Type of Screen (With Proxy)		Sig	
				First Screen	Second Screen		
Type of residence							
Urban	44.1	38.1	**	37.2	39.5	n.s.	43.3
Rural	55.9	61.9		62.8	60.5		56.7
Living arrangement							
Living alone	12.9	15.0		15.4	14.3		13.2
Living with spouse only	9.5	7.0		6.3	8.0		9.2
Living children	59.6	62.7	*	64.7	59.5	n.s.	60.0
Other types of living arrangement	17.9	15.4		13.5	18.3		17.6
N	5,209	776		475	301		5,985

*p < .05. **p < .01. ***p < .001. n.s = not significant.

Source: Calculated by DRDF using original LSAHP data.

Of note is the clear age gradient, with an increasing proportion needing a proxy with advancing age due to hearing impairment and poor cognitive or psychological condition.

In conclusion, we emphasise the significance of proxy interviews in improving the representativeness of the LSAHP study population. This is particularly relevant in the context of the OPs, our study population, who are expected to have poorer health and/or higher cognitive impairment. The good news is that proxy interviews constitute a small share of the total sample (13%). However, our analysis demonstrates that proxy interviews have a significantly different profile from the regular interviews. This should be borne in mind in the analysis and interpretation of findings. Analyses should also take note of the data deficiency of proxy interviews, specifically the exclusion of questions pertaining to beliefs and attitudes as well as those that measure self-assessment of the OP respondent to minimise bias. Further analysis should try to assess the validity of proxy responses and see which indicators may be subject to respondent biases (Nuemann et al., 2015).

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. <https://doi.org/10.1111/j.1532-5415.2000.tb03877.x> (accessed 21 May 2019).
- Oksuzyan, A., T. Sauer, J. Gampe, A. Höhn, M. Wod, K. Christensen, and J.W. Wastesson (2019), 'Is Who You Ask Important? Concordance between Survey and Registry Data on Medication Use among Self- and Proxy-Respondents in the Longitudinal Study of Aging Danish Twins and the Danish 1905–Cohort Study', *The Journals of Gerontology*, 74(5), pp.742–47. <https://doi.org/10.1093/geronagly104> (accessed 21 May 2019).
- 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 21 May 2019).

Annex C: Research Team and Field Personnel

Principal Investigator

Grace T. Cruz

Co-Principal Investigators

Yasuhiko Saito

Osuke Komazawa

Project Manager

Christian Joy P. Cruz

Research Assistants

Mark Ryan B. Paguirigan

Maria Karlene Shawn I. Cabaraban

Subject Matter Specialists

Shelly Ann F. Dela Vega

Elma P. Laguna

Maria Midea M. Kabamalan

Josefina N. Natividad

NImfa B. Ogena

Statistical Consultant

Erniel Barrios

Data Processing Team

Coordinator

Maria Paz N. Marquez

Programmer

Leo Angelo Ocampo

Data Processing Assistants

Connille Abellera

Gianna Lauren Ruizol

Jeconiah Boongaling

Klarriness Tanalgo

Felipe Ramos

Celia Abbago

Administrative Staff

Ariel Israel Murillo

Josephine Pariñas

Raphy Sales

Field Personnel

Metro Manila and Luzon

Field Supervisors

Abner Alusen
Ernesto Escanillan, Jr.
Charles Quenny Haban
Angelyn Patacsil
Gamela Ann Septo

Field Interviewers

Vanessa Mae Abril
Domingo Agasa
Rose Mae Aguado
Rizal Alonzo
Julie Ann Bitgue
Glen Cabrera
Kenneth Clemente
Catherine Coronel
Jean Dijamco
Alma Escanillan
Dominic Flaminiano
Mahalla Ileen Marquez
Rochelle Mundoc
Ma. Lourdes Oliver
Reinnere Palomaria
Jayson Romero
Ana Charisse Sanchez
Marlyn Sorquiano
Sylvarstein Razner Surgisis
Dan Angelo Tabao
John Paul Talay
Carole Tenio
Ronald Valera

Visayas

Field Supervisors

Andrea Baoalan
Erna Canale
Clarita Celada

Field Interviewers

Daniel Amosco
Evelyn Batibot
Romer Bojocan
Reynaldo Cabsag
Jicky Cabus
Renalyn De Sulat
Mhay Khristie Geniston
Wilma Isanan
Ruel Lavado
Charlyn Montes
Avelyn Morillos
Renato Nacionales
Grace Rañola
Marly Salas
Ryan Salas

Mindanao

Field Supervisors

Maria Melanie Bagwang
Erwin Escanillan
Aurelia Estimo

Field Interviewers

Anelyn Agang-Ang
Lea Alivar
Marilou Bacol
Josie Briones
Mercedita Cabotaje
Gennie Camacho
Arceli Catubig
Jeychris Dagandan
Christine Floreta
Israilee Gantalao
Lorelaine Gestopa
Ailele Inocian
King Joseph Dennise
Lomopog
Sol Lomopog
Estrella Panogalon
Kim Xavier Rodero
Marietta Simborio
Sean Michael Tesoro

Annex D: Advisory Committee

Department of Health – Philippines (DOH)

National Economic and Development Authority (NEDA)

Department of Social Welfare and Development (DSWD)

Institute on Aging – National Institutes of Health

University of the Philippines Population Institute (UPPI)

Commission on Population and Development (POPCOM)

Philippine Statistics Authority (PSA)

United Nations Population Fund Philippines (UNFPA Philippines)

Asian Development Bank (ADB)

Philippine Health Insurance Corporation (PhilHealth)

Social Security System (SSS)

Government Service Insurance System (GSIS)

Coalition of Services for the Elderly (COSE)

Department of Psychology, UP Diliman

Ageing and Health in The Philippines

The Longitudinal Study of Ageing and Health in the Philippines (LSAHP) is the first multi-actor longitudinal study on ageing in the Philippines with information coming from older Filipinos, their caregivers, and adult children. The 2018 baseline data provides comprehensive information on the health, economic status, and overall well-being of a nationally representative sample of older Filipinos aged 60 and older. These data will be a valuable resource for the crafting of evidence-based policies and programmes for this sector of the population.

LSAHP is designed to (1) investigate the health status and well-being, as well as their correlates, of Filipinos aged 60 years and over; and (2) assess the determinants of health status and transitions in health status and overall well-being. The study is part of a comparative study of the Philippines and Viet Nam. LSAHP is funded by the Economic Research Institute for ASEAN and East Asia and implemented by the Demographic Research and Development Foundation, Inc.



Headquarters:

The ASEAN Secretariat 70A, Jalan
Sisingamangaraja South Jakarta
12110, Indonesia

Annex Office (Mailing Address):

Sentral Senayan II, 5th & 6th floor
Jalan Asia Afrika No. 8 Gelora Bung
Karno, Senayan Jakarta Pusat 10270,
Indonesia

Website : www.eria.org



Address :

PH1200 2/F Palma Hall,
University of the Philippines,
Roxas Ave., Diliman, Quezon
City 1101, Philippines

ISBN 978-602-5460-22-7

