Inequality in Later Life in Rural Indonesia: Filling the Gaps in Meeting the Needs of Older Persons

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A thesis submitted for the degree of Doctor of Philosophy of The Australian National University

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Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university. To the best of the author's knowledge, it contains no material previously published or written by another person, except where due reference is made in the text.

Muhammad Ulil Absor July 2020

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Abstract

Indonesia is undergoing important demographic transitions at present, not the least of which is an ageing population. Features associated with this are decreasing fertility rates, increasing life expectancy, recent welfare reforms under President Jokowi's administration, the migration of young people to the cities, and unequal development across various social groups of Indonesian society. Central questions for the present study included the older generation's current situation in rural Indonesia, how it varied across sociodemographic groups, how inequality was produced and how the existing system could be improved. Data was drawn from the 2016 Ageing in Rural Indonesia Survey (ARIS), limited to six villages across Sumatra, Java and Bali. Guided by old-age vulnerability theories, inequality is determined by identifying the perceptions held by older people of the outcomes that they seek to pursue and avoid during their old age. Based on this framework, inequality is defined as differences in health, care and support from children, standards of living and access to services. The study found inequalities in the lives of older people across regions, ethnicity, social class and gender. Elderly women are significantly more likely to suffer lower levels of health and greater economic disadvantage and are less likely to have access to pensions. Older women can be both care recipients and providers of a disproportionate amount of unpaid care and domestic work for their families. This study also found that Javanese are substantially more likely to have better health and less likely to experience economic disadvantage compared with non-Javanese. We also found that those from higher social classes were significantly less likely to have disability, anxiety and economic disadvantage, as well as being more likely to access social services including pensions, health insurance and the Poslansia program. The study also concluded that coverage of social welfare programs for the elderly was very small in scope and mostly concentrated in western Indonesia. I argue that family support systems and community and welfare systems govern the experience of inequality in old age. The system in the family and community determine not only role-related activities and divisions of labour between them, but also gender differences in opportunities, which provide men and women with different and unequal resources, opportunities and exposure to risks and hazards. Elderly women are more exposed to hazards associated with caring and employment. These systems, which are largely constructed from social and religious norms, produce expected roles and needs of the elderly that in turn influence their overall well-being. The welfare system also contributes to the stratification of the roles of elderly men and women. The influence of the welfare system can be seen through the way programs for the elderly are organized and provided. The social security system itself often helps to cause limited access to non-contributory programs. As these systems determine inequality in later life, a crucial need has emerged to address the underlying causes of inequality as well as focussing on medical interventions. Older people must be mainstreamed, and much greater recognition is needed in Indonesian government policy of the growing problems they face.

List of Abbreviations

ADLs	Activities of Daily Living
ARC	Australian Research Council
ARIS	Ageing in Rural Indonesian Survey
ASEAN	Association of Southeast Asian Nations
Aslut	Asistensi Sosial Lanjut Usia; Social Assistance for the Elderly
BKKBN	Badan Kependudukan dan Keluarga Berencana Nasional; National Population and Family Planning Board
BKL	Bina Keluarga Lansia; Empowerment program for families of the elderly
BMI	Body Mass Index
BPJS Kesehatan	Badan Penyelenggara Jaminan Sosial Kesehatan; National Social Security Agency on Health
BPS	Badan Pusat Statistik; Central Bureau of Statistics
CEPAR	Centre of Excellence in Population Ageing Research
CSR	Corporate Social Responsibility
GDP	Gross Domestic Product
Halun	Hari Lanjut Usia; the national day for the elderly
HDI	Human Development Index
IADLs	Instrumental Activities of Daily
IFLS	Indonesian Family Life Survey
ILO	International Labour Organization
JKN	Jaminan Kesehatan Nasional; National Health Insurance
KIS	Kartu Indonesia Sehat; the Healthy Indonesia Card
Komnas Lansia	Komite Nasional Lanjut Usia; National Council for Older People
Lansia	Lanjut Usia

LLCs	Limited Liability Companies
MDGs	Millennium Development Goals
NHI	National Health Insurance
NRR	Net Reproduction Rate
OADR	Old Age Dependency Ratio
OASD	Old Age Share of Dependency
OECD	Organisation for Economic Co-operation and Development
PBI	Penerima Bantuan Iuran; Premium Assistance Recipients
PKH Lansia	Program Keluarga Harapan Lansia, Family Hope Program for the Elderly
РКК	Pemberdayaan Kesejahteraan Keluarga; Family Welfare Empowerment
PNPM Mandiri Pedesaan	Program Nasional Pemberdayaan Masyarakat Mandiri Perdesaan, the National Program for Rural Community Empowerment
Polindes	Pondok Bersalin Desa; village health clinic
Posbindu	Pos Binaan Terpadu; Integrated Health Service Post
Posyandu Lansia/Poslansia	Pusat Pelayanan Terpadu Lanjut Usia; Integrated Health Service Post for Elderly
Poskesdes	Pusat Kesehatan Desa; A village health center
PPP	Purchasing Power Parity (PPP)
Prolanis	Program Pengelolaan Penyakit Kronis; Management of chronic disease program
Puskesmas	Pusat Kesehatan Masyarakat; community public health services
Raskin	Beras Miskin, Rice for the Poor program
RPJMN	Rencana Pembangunan Jangka Menengah Nasional; Medium- Term National Development Plan
SDGs	Sustainable Development Goals viii

SJSN	Sistem Jaminan Sosial Nasional; National Social Security System
SPM	Standar Pelayanan Minimal
Susenas	Survei Sosial Ekonomi Nasional; the National Socioeconomic Survey
TFR	Total Fertility Rate
WHO	The World Health Organization

List of Glossary

Adat	social norm
Aji lutung	the survival strategy in combining farming and having
	livestock
Akekahan	the ceremony after the birth of a baby
Anak	children
Bidan desa	midwife
Buruh tani	peasants
Emoh	I do not want
Guyub	peaceful and togetherness
Haji	a Muslim who has performed the pilgrimage to mecca
Hormat	the values of showing respect
Ibadah	worship god
lsin kok	feel ashamed
Islam kejawen	Javanese-style Islam
Karang Werdha	a community-based older person's association at village
	level
Kadedeh	the practice of giving a larger amount of inheritance for
	the child who takes care of older parents
Kedai kopi	coffee shops
Kepala dusun	head of the sub-village
Ketua RT	the neighbour community
Kota santri and wali	city of Islamic students and Islamic guardians
Lansia	older person
Lebaran	the Muslim fasting celebration
Main ceki	gambling
Makin getol kerjo	have a more intense passion to earn money

Marga	clan
Mantri	paramedic
Nembang	sings a traditional song
Ngirimi makanan	sending food
Nrimo	acceptance
Nujuh bulanan	Prenatal ritual of the seventh month of pregnancy,
	roughly equivalent to a baby shower
Nyumbang	contribute
Obat	medicine
Paguyuban anak rantau	child migrant organizations
Pasrah	surrender
Pecel lele lamongan	catfish pecel
Pengajian	islamic recitation
Pengobatan	medical treatment
Permakanan	food vouchers or non-cash food assistance
Penerima Bantuan luran	premium assistance recipients
Pesta	party
Plesterisasi	house reconstruction
Polindes	village health services
Posyandu Lansia-Poslansia	integrated health service posts
Posbindu	integrated health service posts
Pos ronda	neighbourhood watch post
Program makanan tambahan	supplementary food program
Puskesdes	a community health centre
Puskesmas santun lansia	elderly friendly community health centre
Poli geriatri	geriatric clinics
Prolanis	management of chronic disease program

Pulung gantung	hanging
Pupuk kandang	organic fertiliser
Rasa	feeling
Rewang	cooperative cooking
Rukun	the inner self in harmony
Sabung ayam	cockfighting
Sakit tua	frail older persons
Sedekah	voluntary alms giving,
Senam lansia	physical exercise
Semeleh	lean on god
Sholat berjamaah di masjid	group prayer in the mosque
Soto lamongan	lamongan soup
Subak	the irrigation society
Suntik	injection
Tahlilan	seven days of praying ceremonies after someone
	passed away
Warung pecel lele	self-employed selling fried catfish
Zakat	obligatory almsgiving

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Chapter 1 - Introduction

1.1 Background

In the village of Giriasih, Gunung Kidul Yogyakarta one morning, a group of people (about 30 people) were doing gymnastics. The majority of them were over sixty, the age at which Indonesia labels a person "*lansia*" (older person). A few of them were in their eighties and fifties. Many of those present were older women, active economically and living with their spouse only or living alone as their children had migrated to the growing cities. After the gymnastics, they were provided with healthy food and vitamins. As they ate, a conversation turned towards a topic that invariably comes up commonly about their health, works and their family.

The people doing gymnastics and talking about their family and health are part of a growing population of older people in Indonesia. Like many other countries around the world, the Indonesian population is ageing. Population ageing is predicted to be an inevitable future for the Indonesian population. This research is an attempt to understand the nature of life situations of older persons and their environment across socio-demographic groups, how does it vary across sociodemographic groups, how inequality is produced and how the existing system can be improved.

The ageing population as a demographic phenomenon is a global trend. An ageing population, defined as an increase in the proportion of older people in the total population, raises worldwide attention since it is prevalent across societies, continuing and has profound implications for most human beings. In 2009, the United Nations estimated that 737 million persons had reached the age of 60 years and above globally, and predicted an increase to 2 billion by 2050 (Hokenstad Jr & Restorick Roberts, 2011; Strydom, 2008). Globally, the population aged 60+ is the fastest-growing population cohort compared with other age groups. Moreland, Smith, and Sharma (2010) estimated the proportion of older persons globally at 11.7 percent in 2011 and predicted sharp increases to 22 percent and 30 percent in 2050 and 2100 respectively, while other age groups particularly children between 0 to 14 years were estimated to decrease gradually (Moreland et al., 2010; WHO, 2018). The World Health Organization (2018) estimated that the rate of increase of the proportion of the population aged 60 years or more was considerably higher than at any time in the past.

Bengtsson (2010) determined that the growth of population ageing in the developing world is accelerating much more quickly than in developed countries. As a result, population ageing will have its highest effect in the former, particularly in the Asian region (Chiu, 2008). An ageing population generates a multitude of economic and social implications. Such a

population places pressure on social spending due to rising needs for social care and healthcare costs for the elderly (Mason, 2007). An ageing population also affects savings, investment, consumption patterns, public expenditure, labour markets, taxation and income transfers between generations (Bengtsson, 2010; Gruescu, 2007; Mason, 2007).

Indonesia is one of the developing countries in Asia where rapid demographic changes have occurred, and population ageing is rapid (Arifin & Ananta, 2016; Hugo, 2000; Niehof, 1995; Suryadinata, Arifin, & Ananta, 2003; Van Eeuwijk, 2006; Witoelar, 2012). According to Arifin and Ananta (2016), Indonesia contains one of the world's most rapid ageing populations. It was projected to have the largest increase in the ageing population (more than 400 percent) between 1990 and 2025 of all 50 countries studied (Adlakha & Rudolph, 1994). Indonesia is estimate to be well ahead of other Southeast Asian countries in the absolute number of the aged, followed by Vietnam, Thailand and the Philippines between 1970 and 2030 (Nations, 2010)

Although the percentage is a significant indicator, the absolute size of the elderly population is more consequential in terms of socioeconomic planning (Adlakha & Rudolph, 1994). The number of the elderly who are at the age of 60 and over are increasing dramatically from 5.3 million (4.48 percent of Indonesia's total population) in 1971 to 11.3 million (6.29 percent) in 1990 and around 18.1 million (7.6 percent) in 2010. Presently, there are 22 million people aged 60 and over, and this number is projected to rise to 48 million by 2035 when the percentage of the population at these older ages will be almost 16 percent, double the present level. The annual rate of growth of the older population is at 4.7 percent which is higher than the proportion of the general population at 2.9 percent (Arifin & Ananta, 2016).

A high proportion of these older persons live in rural areas from which young people mostly migrate to industrial locations when seeking better occupation and higher wages (Jones, 2016; Kreager, 2006). These rural older people are often considered as a vulnerable and disadvantaged group due to lack of carers arising from child migration and also because rural health facilities are less capable and comprehensive than their urban counterparts. In the past, population-related policy research mostly focused on issues of fertility, family planning, migration and the unequal distribution of population across Indonesia. Up to now, little research attention has been given to the current situation and needs of rural older adults (Ananta, 2012; Keasberry, 2001; Niehof, 1995).

This research is an attempt to investigate the situation of older people in rural Indonesia. This study is very important if the future needs of elderly people are to be anticipated and if appropriate policies can be formulated, based on four rationales including: the impact of demographic transition on older persons, young people's migration challenge to the traditional family-based aged care system; welfare reform under the Jokowi administration; and unequal development and plurality of Indonesian society.

1.1.1 Demographic transition and older people's circumstances

My research looks at the current circumstances of older people in rural areas as a consequence of demographic transitions in Indonesia. In this case, demographic transition is characterized by the growing older population. The increasing proportion of the aged within the Indonesian population arises from fertility decline and increasing longevity. During the past forty years, Indonesia has experienced rapidly declining fertility rates among large parts of the population. The Total Fertility Rate (TFR) declined from 5.6 children per woman during the late 1960s to 4.7 in the late 1970s and declined still further to 3.3 in the 1980s and to 2.3 in the 1990s. There followed a small increase to 2.4 in the 2000s while a decline is predicted during 2010-2035, falling to below replacement level at 1.9 by 2035 (Adioetomo & Mujahid, 2014; Arifin & Ananta, 2016). In addition to this fertility decline, life expectancy is also increasing dramatically from 59.8 years in 1990 to 65.4 years and 70.7 years in 2000 and 2010 respectively. Life expectancy is predicted to increase further to 72 years by 2035 (Adioetomo & Mujahid, 2014). The life expectancy for older women is higher than men (for instance 73.19 years versus 69.30 years) in 2018 (BPS, 2020a).

As a result of declining fertility and improving life expectancy, Indonesia's age structure is steadily changing towards having more people in older age groups. This is shown by an increase in the median age group from 27.2 years in 2010 to estimated 33.7 years in 2035. The aging index is expected to register a dramatic increase from 26.3 in 2010 to 73.4 in 2035 while the potential support ratio is estimated to drop dramatically from 13 workers per one older person in 2010 to only 6.4 workers in 2035 (Adioetomo & Mujahid, 2014). Due to declining fertility rates and increasing life expectancy, Indonesia is following other middle-income Asian countries in facing the aging population without an adequate social security system and infrastructure in place (A. Utomo, Mcdonald, Utomo, Cahyadi, & Sparrow, 2019).

Another consequence of a declining fertility rate and improving life expectancy is smaller family size, resulting in a reduced number of children who support and care for the elderly (Johar & Maruyama, 2011; Witoelar, 2012). Like other Asian countries, the family is the main informal social protection for the elderly, and when the role of the family weakens, the demand for formal support from the government will increase. As another consequence at the micro-level, ageing will lead to a change in the balance between the needs for and provision of care, with unavoidable impacts on public social security and care systems (Niehof, 1995).

The elaboration of the consequences of demographic transition in Indonesia raises an important question about the current situation particularly the health conditions of older people

and their variations across the region, and among ethnic and socio-demographic groups. Health status is often used as an indicator of well-being (Dong, Zhang, & Simon, 2014; Henning-Smith, 2016; Kahn & Juster, 2002; Siedlecki, Salthouse, Oishi, & Jeswani, 2014). Kahn and Juster (2002), for instance, found that surveys of well-being utilize one or more of three definitions including satisfaction with life, health and ability/disability, and composite indexes of positive functioning.

It is probably not an oversimplification to assert that the earliest studies of the ageing in Indonesia (for instance Adioetomo & Mujahid, 2014; Arifin & Ananta, 2016; Wirakartakusumah, Nurdin, & Wongkaren, 1997) used macro data – mainly census data – to analyze the situation of the elderly. Moreover, in the body of literature on ageing in Asia (for example G. Andrews, 1992; Albert Isaac Hermalin, 2014; Martin & Kinsella, 1994), ageing studies tended to concentrate on measuring one dimension of well-being, such as health and economic wellbeing. Lloyd-Sherlock (2006) argued that the majority of studies in this area have customarily focused on material aspects of wellbeing, and attention has increasingly narrowed to poverty reduction strategy.

In addition to pan-Asian studies, there have been a number of studies in Indonesia on the plight of the elderly (for instance Kreager, 2006; Kreager & Schröder-Butterfill, 2007; Subiyono, 1999; Thristiawati, 2013; Van Eeuwijk, 2006). Most of these have examined the vulnerability of the elderly. Kreager (2006) employed anthropological and demographic field studies aimed at analysing the impact of migration on vulnerability at older ages in three Indonesian communities. The communities were chosen by the different characteristic of communities, variations based on socio-economic status and the variability of networks developed by the families of older persons. Kreager (2006) found that children who have migrated elsewhere provided a significant component of support for older people, often in combination with the support provided by local family members. The less advantaged families are commonly less able to use migration opportunities than higher status families because poor households have smaller networks and inadequate resources to cope with their marked disadvantages. He concluded that the higher vulnerability of poorer households was related to migration histories, to the prevalence of smaller networks, and to when the migrations are within rural areas.

Kreager and Schröder-Butterfill (2007) also analysed the demographic and social factors limiting the size of elders' networks, particularly identifying where and how gaps in networks of support emerged, and whether and how the elderly coped with them. They found that gaps in networks generally appeared as a result of childlessness, migration and alienation. However, their impacts on older people's vulnerability were determined by socioeconomic status, reputation and cultural norms. Van Eeuwijk (2006) found a different aspect of older

persons' vulnerability in urban areas in Indonesia. Older persons' vulnerability was associated with marital status and gender. Unmarried women and widows were the most vulnerable groups since mostly older persons are cared for by their children and their spouse or both. Van Euwijk also found that elder vulnerability was associated with poverty, weak support networks, and having caregivers who are themselves vulnerable.

Similarly, Thristiawati (2013) found that women experienced ageing differently from men as a result of enduring inequalities across their life span in education, labour force participation, public programs for health, income security, the national legal system and cultural practices. Older women experienced a lower level of physical and economic wellbeing than older men as a result of the lower status of women in the community. Higher socio-economic status does not likely influence the physical wellbeing of female elder persons compared to men. The exception to this is the female Javanese migrant who tends to achieve better health outcomes if she has a relatively equal status in her family, which is guite common, as it accords with Javanese cultural norms. Based on this finding, Trisnawati concluded that a relatively equal status between husband and wife had a positive effect on the wellbeing of both male and female elder persons. Other useful research was conducted by Subiyono (1999) who investigated the participation of older persons in the social security system in the Klungkung district of Bali and the Klaten district of Central Java. He found that the participation rate of older persons in the social security system (pension and insurance) was very low, at around 14.5 percent in those two districts. The low level of social security participation was caused by low levels of previous work status and limited personal income.

The latest research on older people's wellbeing was conducted by Cahyo (2018). His data utilises the same data as this research, the 2016 Ageing in Rural Indonesian Survey (ARIS). Cahyo's research was aimed to investigate the factors determining the mental health of older people. Cahyo employed measures of psychological distress and generalized anxiety disorder. Cahyo argued that demographic, social, and physical health are significant predictors of distress and anxiety. Another recent study using the same data was conducted by A. Utomo et al. (2019) on social engagement and the elderly in rural Indonesia. The aim of that study is to analyze how levels of social engagement vary across the different socio-demographic groups within the elderly population in different village settings. It found the older people play significant roles in sustaining the social fabric of these communities, but their overall engagement varies by village. The campaigns to promote active aging, and to extend the retirement age, seem to have limited relevance to older people in the rural villages. More appropriate policy responses should focus on providing medical care, and on preventing and managing old-age disability in these rural areas (A. Utomo et al., 2019).

Up to now, no particular study has elaborated the nature and current life situation of elderly persons in rural areas using a broader focus on the variations of bio-psycho-social needs/wellbeing of the elderly across region, gender and social class; how they are being met; and how inequality arises in old age, particularly its intersection with gender, social class, ethnicity, region and migration of children. Understanding old age inequality is essential to understand society and the mechanism of how inequality works. Abramson (2015) argued that studies of ageing would contribute to understanding stratification, inequality more broadly, and society in general. Inequality in later life is an unavoidable consequence of the differentiation of cohorts over time (O'rand, 2018). Understanding inequality in later life is also pivotal to examine the unique historical, institutional and social systems governing the subjective experience of aging in diverse contexts. The experience of aging is not universal. It is a social reality constructed by meanings of everyday life (Samanta, 2017). As the experience of being an older person is not universal and to identify the inequalities involved, it is important to identify first the perceptions of older people of the outcomes they seek to pursue and avoid during old age. Identifying the aspirations of this group can assist in developing more effective and strategic policies (Lindland, Fond, Haydon, & Kendall-Taylor, 2015). This study examines older persons' perceptions of their needs, and of good and bad outcomes in their old age.

1.1.2 Youth migration and its challenges to the family-based aged care system

Besides declining fertility and rising life expectancy, the outmigration of young people plays an increasingly important role in shaping the age structure of rural Indonesia. The migration of young people from rural to urban areas seeking education and employment opportunities contributes to the higher proportion of older people in rural areas. The younger generation has more opportunities outside their hometowns and weaker motivation to follow traditional family norms (Johar & Maruyama, 2011). The limited job opportunities in rural areas influence young people to migrate in order to seek better employment. The youth migration exacerbates age-structure imbalances in rural areas by removing young adults as the older population is increasing (Kreager, 2006). The labour force migration of young people contributes to a decline in the availability of family-based care.

The percentage of older persons in rural areas is significantly higher than in urban areas. According to the 2010 Census, older persons accounted for 8.7 percent of the rural population and 6.5 percent of the urban population; and the 2014 National Social and Economic Survey reported that 10.87 million of the elderly reside in rural areas while the elderly in urban areas numbered 9.37 million. With continuing outmigration of the young population, the gap in ageing ratios between urban and rural areas may widen further. Moreover, the

returnees of overseas migrant workers are likely to return at relatively older, and soon become older persons that in turn accelerate the ageing process in rural areas (Arifin & Ananta, 2016).

A. Utomo et al. (2019) pointed out that the high rate of outmigration of young people creates "pockets of ageing". Some of the districts might be considered as "pocket of ageing" are Gunung Kidul District in Yogyakarta and Pacitan District in East Java where 18.3 percent and 16.1 percent respectively of the population are older persons (Arifin & Ananta, 2016). The proportion of older people in the village level can be even greater in some cases, such as the village of Giriasih in Gunung Kidul District where 22 percent of its population are older persons while 24 percent of the village of Bugoharjo in Lamongan District are elderly.

The young people's migration also influences the dependency ratio. The dependency ratio in rural areas is higher than in urban areas (14.09 versus 11.40). This in turn indicates that the burden on productive people of older people in the countryside is higher than in urban areas. The higher dependency ratios might also be associated with a higher prevalence of ill-health among older people. The prevalence of infectious diseases among older people in rural areas is indeed higher compared to those living in urban areas (Abikusno, 2007). The higher incidence of health problems among rural older adults might be exacerbated partly by the lower quality of health services in rural areas. Hospitals providing geriatric services are mostly located in urban areas.

Arifin and Ananta (2016) argued that there is an interaction between migration, ageing and development. Migration happens in low-income regions, which are mostly in rural areas. Poor economic conditions force young people to migrate to richer or more developed areas. As a result, youth migration accelerates the growth in proportion of the aged in the countryside and lowers the comparative proportion of the aged in wealthier regions, which are mostly urban areas.

Outmigration by young people also might weaken the traditional values and customs of caring for older persons in rural areas in which traditionally children were responsible for taking care of their parents. Witoelar (2012) argued that "modernisation" would weaken this traditional family pattern. Similarly, Keasberry (2001) argued that urbanisation and migration could have a negative impact on care for older adults, particularly in rural areas. Do-Le, Raharjo, Graha–LIPI, and Subroto (2002) and Witoelar (2012) too found that the traditional role of caring for elderly family members was weakening. Do-Le et al. (2002) found that the traditional norm, in which children are taking care of the elderly, has been disappearing in Indonesia. The elderly might not receive the same strong support from the younger generation compared with the case in earlier generations. Co-residence or cohabitation with older parents is one of the indicators of support from children. However, based on the Indonesian Family Life Survey (IFLS) data, Johar and Maruyama (2011) found that the percentage of elderly

parents living with a child had dropped from approximately 65 percent in the 1990s to around 50 percent in 2007. The migration of children is a factor contributing to the decreasing proportion of family cohabitation.

The complexity of young people's rural-urban migration compels a need for analysis of the living and care arrangements for older persons, bearing in mind different ethnicities and settings, as well as as factors of exclusion from child support. Extensive research has been done on this issue in the Western countries, but less attention has been paid to this topic in Indonesia, particularly in rural areas. Some studies (for example Kreager & Schröder-Butterfill, 2015; Schröder-Butterfill, 2004a; Schröder-Butterfill & Fithry, 2014; Van Eeuwijk, 2006) have examined the provision of care for the elderly in Indonesia and found that both son and daughter play crucial roles in this area. Filial responsibility based on religious teachings explains the significant role of children in taking care of older parents. Sung (1998) elaborates how each major world religion such as Judaism, Christianity, Hinduism, Buddhism and Islam teach that is a child's responsibility to address the needs of parents. Those religions clearly stress the duty or obligation of a child to not only support parents, but also to honour, love and respect them.

Extensive research has also been conducted on the living arrangements of older people in Indonesia. The most common type of living arrangement of the elderly in Indonesia is coresidence with children (Arifin, 2006; Frankenberg, Chan, & Ofstedal, 2002; Witoelar, 2012). The second type of living arrangement is – living with only a spouse while living alone– is the least common at less than 5 percent of men and between 9 and 11 percent of women in 1993 and 2007 (Arifin and Ananta, 2016).

Keasberry (2001) conducted a study on the issue of the living and care arrangements of older people in two rural villages in Yogyakarta. The study found that older people were still living with at least one of their children or their relatives, or at least one child who is living in the same village. The large majority of the elderly did not need help with instrumental and personal activities as they were able to perform these without difficulty. The elderly were less likely to co-reside with their daughter, and daughters helped fewer elderly parents in their daily activities. The research also found that older women at the age of 75 and over were the most vulnerable group in this cohort (Keasberry, 2001).

A body of literature also has elaborated the significance of informal networks for older people's support and wellbeing. Once older people retired, they tended to rely on a broad range of networks for material support of which children were often the most important (Biddlecom, Chayovan, & Ofstedal, 2002; Knodel & Debavalya, 1997). Relatives outside the nuclear family (e.g. nephews, nieces, siblings, grandchildren), as well as neighbours and community institutions, also played a role in providing material support, especially where elders

were childless or de facto childless (Agree, Biddlecom, & Valente, 2005; De Jong, 2005; Indrizal, 2004; Schröder-Butterfill, 2004a; Schröder-Butterfill & Kreager, 2005). Another significant informal support arose from local communities. Local communities played crucial roles in sustaining and caring for older people, particularly when the family could not provide support (Lloyd-Sherlock, 2004).

Cahyadi (2017), using the same data set as this research, examined the impact of ruralto-urban migration of adult children on the intergenerational exchange of support for elderly parents living in rural areas. The study found that migration contributed to improving income support, but conversely, migration led significantly to a drop in the provision of instrumental and emotional support for elderly parents. Migrant children contributed more in financial support, while non-migrant children contributed more in instrumental and emotional support. Elderly parents recognized that non-migrant children were the most reliable providers for all types of support (financial, instrumental, and emotional).

However, less attention has been given in these researches to variations in living and care arrangements for different ethnicities and settings. Less attention also has been given to the extent of the contribution by older people themselves in providing care and the ways in which this can affect health and disability in later life. Little attention also has been devoted to factors associated with cases where older people are excluded from the support of children. My research is an attempt to fill these gaps by investigating how living and care support are implemented in different socio-cultural settings, particularly in areas where high migration of young people has occurred. My research also examines factors associated with exclusion from child support.

1.1.3 Welfare reform under the Jokowi administration

Welfare reform aimed at providing universal social security to all Indonesian citizens through the implementation of Law No. 40/2004 on National Social Protection Law (*SJSN - Sistem Jaminan Sosial Nasional*) and Law No. 24/2011 on the National Social Security Agency (*BPJS – Badan Penyelenggaran Jaminan Sosial*) provides an opportunity to improve services to the elderly. Widjaja and Simanjuntak (2010) pointed out that Law no. 40 promulgated in 2004 was the most important turning point in the development of Indonesian social security measures. The law provided for a comprehensive national social security system covering all citizens, including workers in the informal sectors, the unemployed and the poor. In the formal sectors, the contribution is paid by the employers and employees while the government provides contribution subsidies to the poor. The laws stipulate programs to cover five major policy areas: health insurance, employment injury, old-age pensions and death benefits for each Indonesian

citizen. There are two specific programs for the elderly, the old-age pension and old age savings programs.

Among the major programs are the National Health Insurance (NHI) which commenced operation in January 2014 and the Employment Insurance program in July 2015. President Joko Widodo (Jokowi) also complemented the social security programs through a series of social assistance programs including the Healthy Indonesia Card (*Kartu Indonesia Sehat*), the Family Welfare Card (*Kartu Keluarga Sejahtera*), and the Family Welfare Deposit Card (*Kartu Simpanan Keluarga Sejahtera*). These cards are intended to deliver non-cash welfare benefits to their targeted beneficiaries. Moreover, the Jokowi administration continues to broaden the base of the universal health cover program, and as of June 2016, more than 166 million Indonesians had registered for the National Health Insurance Scheme (Qibthiyyah & Utomo, 2016).

The implementation of those programs indicates the expansion of the welfare state model in Indonesia, in which previous Indonesian governments mostly provided social security benefits to specific groups such as civil servants, the armed forces and formal sector workers. In terms of coverage, the universal coverage of the social security system in Indonesia is similar to the universal welfare state model implemented in Scandinavian countries (such as Sweden, Norway, Denmark and Finland). This change has contributed to policy debates in the area of population and development, including the consideration of older persons. The shifts and transformation in health delivery systems in Indonesia are likely to benefit older persons and are also likely to exert a strong influence on the lives of older adults and their families. This research is an attempt to analyse the extent of access of older people to the various government programs and to assess how existing programs can be improved.

1.1.4 Unequal development and plurality of Indonesian society

Indonesia comprises 17,505 islands divided into 33 provinces. Each province is subdivided into districts and municipalities. There are 399 districts and 98 municipalities. The districts and municipalities are subdivided into sub-districts and villages. There were 6,651 sub-districts and 77,126 villages in 2010. Almost 59 percent of the total population live in Java, an island where the capital city Jakarta is located. Java covers only 7 percent of the total landmass of the nation (Kadar, Francis, & Sellick, 2013). As the most populous island in Indonesia, more than half of economic activity is concentrated in Java.

Given the concentration of population and economic activity in Java, it is no surprise that development throughout Indonesia is unequal. The western islands such as Bali, Java and Sumatra are considered more developed than the eastern part. The proportion of poverty in east Indonesia is much higher than in the west. The rates of poverty in Papua and East Nusa Tenggara in 2019, for instance, were 26.5 percent and 20.6 percent respectively which is significantly higher than the national rate of 9.2 percent, and higher for example than the well-known provinces of North Sumatra (8.6 percent) and Yogyakarta (11.4 percent) (BPS, 2020c). Similarly, the human development index (HDI) in eastern Indonesia is among the lowest compared to the west (BPS, 2020b).

In addition to unequal development across Indonesia, Indonesia is a plural society, with around 300 ethnic groups speaking 250 or so languages. The basic institutions such as the kinship system and social structures prevailing in these groups are varied (Ihromi, 1994). The situation of the elderly also varies significantly by regions, socio-cultural factors and ethnic groups (Ananta, Arifin, & Bakhtiar, 2005; Albert I Hermalin, Ofstedal, & Mehta, 2002; Thristiawati, 2013).

Froggatt (1990) stated that society responds differently to male and female elderly persons. The male elderly are more likely than women to receive services if they are in a caring role. Society also determines what is appropriate and inappropriate for the elderly. For instance, in the Minang (West Sumatra) cultural context, it is regarded as inappropriate, and even shameful for children if their elderly parents are still working. It is taken as a lack of respect if children do not take care of their parents. In another example, Thrisniawati (2013) found that socio-cultural factors played a robust and significant role in the physical and economic well-being of older persons in Lampung province.

Crandall (1991) argued that all societies make assumptions about the optimum level of functioning of different age groups. Older persons might be denied or permitted to engage in certain forms of activities or behaviours, or to have access to certain opportunities in their community. Exploring the cultural perspective on ageing is crucial to examining not only actual care arrangements but also the norms surrounding care provision, behaviour and the meanings of being old. Comparative analysis across different cultural settings and ethnicity puts these focuses into sharper relief. Understanding how people grow old in varied cultural contexts is essential. The diversity of family systems, ethnicity and socio-cultural background, compel a systematic study of its influence in inequality in later life. The ageing process is a social reality constituted by meanings of everyday life. Little research has been carried out on how differences in the community contribute to differences in patterns of inequality.

1.2 Research objectives and research questions

1.2.1 Research objectives

The overall objective of this study is to understand the nature of older people's current situation in rural Indonesia, how it varies across sociodemographic groups, how inequality is produced and how the existing system can be improved.

The following are the detailed objectives:

- 1. To investigate older people's perceptions of their needs, and of good and bad outcomes in old age.
- 2. To examine their current health status; how and in what way does it vary across region, ethnicity and socio-demographic groups of the ageing population.
- 3. To investigate how living and care support are worked out in different socio-cultural settings, and the factors associated with child support exclusion.
- 4. To analyse factors contributing to the level of economic well-being of older persons and the influence of children's financial support in relieving old-age poverty.
- 5. To analyse how and in what way government has supported elderly persons and the extent of access by older people to the components of the government programs, and how existing programs can be improved.

1.2.2 Research questions

- 1. How do older people perceive their needs; and good and bad outcomes in old-age?
- 2. What is the health status of older people, how and in what way does it vary across regions, ethnicity and socio-demographic groups?
- 3. What is the nature of living and care arrangements for older people and what are the risk factors of exclusion from child support?
- 4. What is the determinant of the economic well-being of older persons and does children's financial support play a role in relieving old-age poverty?
- 5. How and in what way has government supported elderly persons, what is the extent of access of older people to relevant components of government programs and how can existing programs be improved?

1.3 Significance of the Study

This study is significant as little is so far known about the topic, particularly on inequality in later life; how and in what ways inequality varies across regions, ethnicity, social class and

gender; the perceptions of older people of good and bad outcomes in old age and the diversity of ageing experience. This study will enrich theories of the diversity of ageing experience, vulnerability and inequality in later life, system theory and system support of elderly, a hierarchy of older people needs, and the diverse caring model. This study is also very significant as it will have policy implications. It will provide a clearer picture of the situation of older persons in rural areas and of the implementation of social welfare programs for the elderly. This research examines the level of well-being on several dimensions and will identify how these levels vary with the major socio-demographic characteristics. Therefore, this research can be a basis for policy development to improve existing social welfare programs that suit local needs and context.

1.4 Organization of the thesis

My thesis is divided into an introductory chapter, main chapters and conclusion. Chapter 1 is an introduction outlining the rationale of the research. In the first section of this chapter, I provide the context of the research, which displays the impact of demographic transition on older persons, the challenge to the family-based aged care system imposed by higher levels of outmigration by young people, the relevance to this of welfare reform under the Jokowi administration, and the effects of unequal development in, and the plurality of Indonesian society. This chapter also elaborates the research objective, research questions and significance of the study.

In Chapter 2, I describe the method used in this study and how the data was collected. Chapter 2 also elaborates the analytical framework guiding the analysis throughout the thesis. In the analytical framework, I identify first the perceptions of older people on the outcomes they seek to pursue and to avoid during old age. I also elaborate older people's perceptions of the most important factors in coping with old age, as a basis for constructing the outcome variable. Chapter 2 also elaborates factors associated with inequality in later life, including sociodemographic exposure, coping capacities and social engagement.

Chapter 3 elaborates the socio-demographic profile of older people in Indonesia. It briefly compares the ageing population in Indonesia and other Southeast Asian countries. Chapter 3 also describes the details of socio-demographic profiles of respondents including gender and age distribution; religious affiliation; ethnicity; educational attainment; marital status; number of living children and location of children.

Chapter 4 explores the health inequalities among the rural Indonesian elderly. In this chapter, I examine the different measures and dimensions of health status among older people. I also analyse how and in what way health status varies across the region, ethnicity and socio-demographic groups of the ageing population.

Chapter 5 elaborates the living and care arrangement of older people in rural Indonesia. In this chapter, I analyse how living and care support is worked out in different socio-cultural settings and factors associated with the exclusion of older people from child support.

Chapter 6 analyses economic activities of older people; factors contributing to the level of their economic well-being and the influence of children's financial support in relieving old-age poverty.

Chapter 7 explores how and in what way the government has supported elderly persons and the extent of access of older people to relevant components of government programs and how existing programs might be improved.

Chapter 8 is the conclusion, which highlights the findings and the academic contribution made by this study. I also conclude with an analysis of broader implications of the findings for policy and program development. Chapter 8 also highlights the limitations of this study.

Chapter 2 - Methodology and Analytical Framework

Chapter 1 introduced the context of the importance of studying inequality in later life in rural Indonesia, the research questions to be investigated, and the objectives and the significance of the research. Chapter 2 elaborates the research methodology and analytical framework. This chapter summarizes the methodology and analytical framework that has guided the data collection and analysis.

2.1 Methodology

2.1.1 Research locations

The data of this study was drawn from an Australian National University Ageing project in Indonesia funded by the Australian Research Council (ARC), the Centre of Excellence in Population Ageing Research (CEPAR) and the ANU School of Demography. The chief investigators of this study were Professor Peter McDonald, Dr. Iwu Dwisetyani Utomo, Dr. Arianne Utomo and Dr Robert Sparrow. The Ageing in Rural Indonesian Survey (ARIS) was conducted in 2015 and 2016 in ten selected villages. The communities were selected deliberately to reflect a recent and increasingly common Indonesian rural situation. The use of a purposive sampling method allowed study area selection to be made based on the potential representation available, as the general condition of the area (Teddlie & Yu, 2007). The purposive sampling method was used to determine the study area samples, particularly districts, sub-districts and villages.

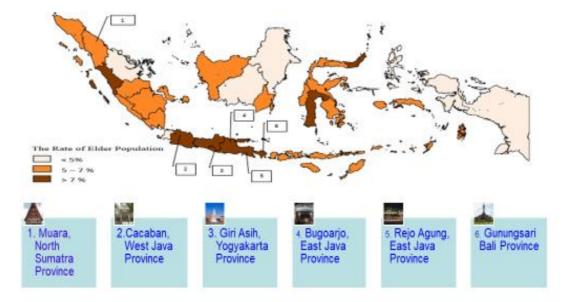
There are two criteria in selecting the villages. The first is the differences in cultural and traditional practices, environmental and ecological differences among the communities. The second is that the village can be categorized as "old population" or "super-old population". Ananta and Arifin (2009) classified the categories of ageing population based on the proportion of individuals aged 60 and over. The first category is a "very young population" when the share of older persons is below 6 percent. The second category is a "youthful population" when the proportion of the ageing population is between 6 and 8 percent. The third category is "transitional population" when it forms between 8 and 12 percent. The fourth category is "old population" when the aged population above 12 percent. The last stage is the "super-old population" when the percentage is above 20 percent.

McDonald et al. identified the aged population at the village level based on the above criteria and utilized the analysis from the 2010 Indonesian census. The selected communities are Muara (North Sumatra Province), Salo (West Sumatra Province), Sikulan (Banten Province), Cacaban (West Java Province), Giriasih (Special Province of Yogyakarta), Winong

(Central Java Province), Bugoharjo and Rejoagung (East Java Province), Gunung Sari (Bali Province), Sei (East Nusa Tenggara Province). Muara consists of three villages including Huto Longtung, Silali Toruan and Bariba Naek. Since the population of the three villages is low (around 1,923 persons in 2010), this study collapsed those three villages into one village called Muara.

For analysis in this thesis, I selected six of the villages as can be seen in the map below.





Source: BPS, 2014, p:21

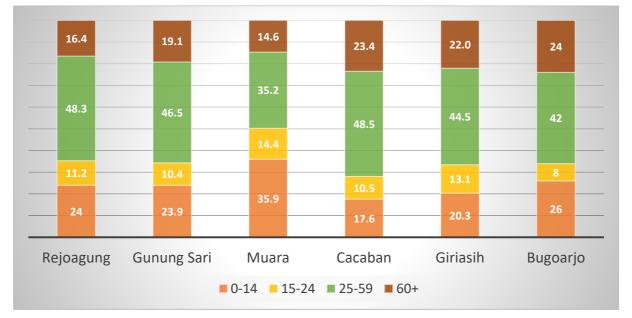
The map above describes the spread of the selected villages. The sample includes one community from Sumatra, namely Muara in North Sumatra Province. Next, four sample villages were drawn from Java: Cacaban (West Java Province), Giriasih (DI Yogyakarta Province), Bugoharjo, and Rejo Agung (East Java Province). Lastly, one village from Bali, Gunung Sari (Bali Province) was selected. The colour of the map indicates the percentage of older people at the provincial level that can be categorized into three, including below 5 percent, 5 to 7 percent and above 7 percent. Niehof (1995) noted that the provinces of Bali, East Java, Yogyakarta and North Sulawesi have the highest proportion of older people.

The six villages represent four major ethnic groups in Indonesia, including Batak, Sundanese, Javanese and Balinese. According to Ananta et al. (2005), the Javanese, Sundanese and Batak are the three largest ethnic groups in Indonesia. Taken together, those three ethnic groups, including Malay and Madurese form 68.4 percent of the total Indonesian population. The villages also represent three major religions in Indonesia, including Islam, Christian and Hindu.

Table 2.1 describes the detailed characteristics of the selected villages in which all the village samples have much higher rates of population ageing than the national average (8.2 percent). The proportion of the older population in the village samples ranged from 14.6 percent (Muara) to 24 percent (Bugoharjo). The detailed description of village characteristics is presented below.

1. Muara, Tapanuli Utara, North Sumatra Province.

North Sumatra is among the provinces where a high number of dependency ratios occurred at 9.84 in urban areas and 11.21 in rural areas. The percentage of the elderly in the province is relatively small at 5.9 percent of its total population (a "very young" population) in 2010. However, at the village level, Muara can be categorized as an "old population" as the proportion of older persons is relatively high, at 14.6 percent (Figure 2.1). Figure 2.1 describes the distribution of the population by age group and village in 2010. The percentage of older people in Muara is the third-largest after the child group (35.9 percent) and the young adults (35.2 percent).





Source: Calculated from 2010 Indonesian Census

				Village Characteristics								
No	Province	District	Village	Main religion	Main Ethnicity	Kinship	Population Size (Persons)	% Village population aged 60+	Migrant Children (%)	Poverty Rate (%)*	Nearest Community Public Health Facility (km)	Topography
1	North Sumatra	Tapanuli Utara	Muara	Christian	Batak Toba	Patrilineal	1,923	14.6	83.5	11.6	8	Mountainous with rice fields and plantations; close to Lake Toba
2	West Java	Sumedang	Cacaban	Islam	Sunda	Bilateral	1,442	23.4	49.3	2.8	0	Very fertile soil, a lot of water resources; mostly rice fields; very close to sub-District capital
3	Yogyakarta	Gunung Kidul	Giriasih	Islam	Jawa	Bilateral	2,143	22	55	15.7	3	Mountainous arid land with hard type of plantation such as teak woods (jati), acacia, and sengon (Albizia) ; lack of water resources
4	East Java	Lamongan	Bugoharjo	Islam	Jawa	Bilateral	1,657	24	76.3	14.1	8	Flat areas surrounded by rice fields and fishponds; the well water is salty
5	East Java	Jember	Rejo Agung	Christian	Jawa	Bilateral	2,066	16.4	60.7	6.3	3	Flat areas surrounded by rice fields and orange farms
6	Bali	Buleleng	Gunung Sari	Hindu	Bali	Patrilineal	2,158	19.1	63.5	12.1	5	Hilly areas with rice and plantations

Table 2.1: The characteristics of selected villages

Source: The 2016 Ageing in Rural Indonesia Survey (ARIS) * (SMERU, 2013)

Muara is located near the shores of Lake Toba and quite far from regional urban centers. It is found in mountainous areas where the majority of people are farmers while a few work as fishermen in Lake Toba (Map 2.2). By using the Google Earth program, Map 2 shows the geographical areas of three continuous villages, Silali Toruan, Baribanaek and Huta Lotung, collectively called "Muara", containing fertile land where rice field, coffee and cocoa plantations stretch across the villages. The community settlement spreads across the village area.



Map 2.2: The geographical areas of Muara (Silali Toruan, Baribanaek, Huta Lotung)



Most of the houses have traditional Batak designs (Picture 2.1).

Picture 2.1: The traditional house where many older people are living in Muara (Photo taken 16/03/2017)

Picture 2.1 shows a typical Toba-Batak house, of the type known as "*Jabu*" which is made from wood. The house usually has stairs at the main entrance, and the lower area is used for

livestock cages for domestic animals such as pigs, chickens, goats and cows. Just below 40 percent of the elderly occupy this type of house. Moreover, the community settlements and plantations in many places are located in raised terraces on the hillsides (Picture 2.2).



Picture 2.2: Rice farm and community plantation in hilly areas (Photo taken on 10/09/2016).

As Muara is located near to Lake Toba, some people work as fishermen on the lake. Although Muara has fertile land and beautiful surroundings (Picture 2.2), many people are poor. The poverty map introduced by the Smeru Research Institute reported that the proportion of poverty in Muara is 11.6 percent, almost double the poverty rates in Rejoagung and five times higher than Cacaban (Table 2.1). Poverty is a factor that might induce young people to migrate to big cities. The 2016 Ageing in Rural Indonesia Survey (ARIS) reported that the proportion of outmigration of adult children in Muara is the highest among the sample villages at 83.5 percent. Like the Minangkabau and the Buginese, the Batak ethnic group is well known for its tradition of traveling and settling widely throughout Indonesia.

Indeed, the infrastructure of public services in Muara is very limited. For instance, there is no government administration office at the village level as the primary facility for public services. Public services are conducted in the village head's house with limited facilities and staff. The office moves if the village head does, or if a new one is appointed. The village head usually serves the community from his or her living room. This custom might indicate a lack of quality and comprehensive service in Muara. The nearest community public health services (*Pusat Kesehatan Masyarakat-Puskesmas*) are about 8 km away, although the village does have a local health clinic (*Pondok Bersalin Desa-Polindes*), managed by a midwife (*Bidan Desa*). The primary role of the midwife is providing accouchement and related services.

However, since she is the only available health staffer at the village level and the community health service is relatively distant, the midwife offers health services to all people, including older people.

As noted earlier, North Sumatra is the home province of the Batak ethnic group, which is the fourth largest ethnic group in Indonesia (Ananta et al., 2005). It is normally classified into six subgroups, including Karo, Simalungun, Pak-Pak, Angkola, Mandailing, and Toba (Ihromi, 1994). Like other communities surrounding Lake Toba, the ethnic group in Muara is known as *"Batak Toba"*. According to Ihromi (1994), the *Batak Toba* people have a rigid patrilineal family structure. The *Batak Toba* in Muara live in the Toba highlands in villages that mainly consist of members of a lineage, people who consider themselves descendants of the same *sa-oppu* (grandfather).

Lineages can be classified into "*marga*" (clan) units. *Batak* People identify themselves by referring first to their *marga*. Families normally wish for sons to continue the line of descent and they consequently pass land and other valuable properties to sons. Daughters are married to members of other lineages from different *marga*. Their welfare becomes the responsibility of the men of those lineages as daughters rarely inherit valuable belongings (Ihromi, 1994). The religion of the people is Christian, particularly Christian Protestant.



Picture 2.3: A family tomb on the hilly rice field in Muara (Photo taken on 16/03/2017)

One of the strong local customs in the village of Muara is respect for older parents. This is demonstrated in the conventional role of older people in solving conflicts in the community. It can also be seen in community meetings where older people are seated in places of honour, above younger people. Older people are invariably regarded as targets of honour and respect. Respect for parents is also shown in funeral and mourning customs. In Muara, when the older people die, their children conduct a funeral "*pesta*" (literally "party"). The bereaved children of the deceased usually provide at least buffalo meat to be distributed to the community, and they organize entertainment such as dancing. The number of buffalo distributed is often more than one if the older people belonged to a high-status or high-income family. The children also arrange an elaborate tomb — the bigger the tomb, the more prosperous and high-status are the family. The prominent and even luxurious tomb is a symbol of high respect for the deceased (Picture 2.3).

2. Cacaban, Sumedang District West Java Province

The dependency ratios in rural West Java are relatively high (10.65 in urban areas versus 15.50 in rural areas). West Java is the home province for the Sundanese ethnic group. The Sundanese are the second largest ethnic group in Indonesia, constituting15.4 percent of the Indonesian population in 2010. As the second-largest ethnic group, the Sundanese also comprise the second largest proportion (16.9 percent) of older people in Indonesia (Ananta et al., 2005).

The province is categorized as a "youthful population", where the proportion of the elderly was around 7 percent in 2010. In contrast, the selected village (Cacaban) can be categorized as a "super-old population", as the percentage of older persons was 23.4 percent in 2010 which was much higher than children (17.6 percent) and young adult (10.5 percent) cohort (Figure 2.1, p.17). The proportion of young adults and children is the smallest percentage in the sample village (17.6 percent and 10.5 percent respectively). The rate of outmigration from the village is also the lowest at just below half of adult children. The fertile land in the village might help to explain the lower levels of migration in this case.

Moreover, the Smeru research institute reported that Cacaban village is the wealthiest village in the survey area, where the poverty rate is just below 3 percent. The village of Cacaban also benefits from a physically closer community public health facility than the other sample villages. This arises because Cacaban is located next to the capital of Conggeang Sub-district. The community settlement is quite crowded, and spreads across hilly areas. Map

2.3 shows the community settlement surrounded by rice field and community plantation or farm.



Map 2.3: Community settlement of Cacaban village surrounded by rice fields and community farms



Picture 2.4: Rice field surrounding Cacaban Village (Photo taken on 18/02/2017)

The village has very fertile land where wet-rice cultivation and plantations stretch around the village (Picture 2.4). The majority of people are farmers. A small number are civil servants, traders and artisans. The village is also rich in water resources. They utilize the water

resources by breeding fish in ponds. Brick houses are increasingly common, especially among the wealthier families.

Cacaban is a Sundanese and Muslim village affiliated with the Nahdatul Ulama (NU), the largest Muslim organization in Indonesia. The Nahdatul Ulama is normally described as a traditionalist Islamic organisation. The NU influence can be seen in the local practice of rituals revolving around life cycles, from birth to death rituals such as "*nujuh bulanan*" (the prenatal ritual of the seventh month of pregnancy, roughly equivalent to a baby shower); "*akekahan*" (the ceremony after the birth of a baby); and circumcision. Religious practices are very strong in the village where most of the women wear a hijab. The most prominent Islamic boarding school in Sumedang District is located near Cacaban where many people from children to older people from Cacaban study Islam according to the NU's style of teaching.

Culturally, the Cacaban community has a bilateral kinship system, where male and female children have an equal position. Under the bilateral kinship system, the roles of each family lineage, i.e., the relatives from the mother's side and father's side, are regarded as equally crucial for emotional ties or transfer of property or wealth. The shares of inheritance of male and female children are also normally equal.

3. Giri Asih Gunung Kidul District Yogyakarta Province

Yogyakarta is one of the home provinces of the Javanese, who constitute more than 95 percent of the province's population. The Javanese are the largest single ethnic group in Indonesia, representing 41.7 percent of Indonesians in 2010. As they are the largest ethnic group, the majority of older persons in Indonesia is also Javanese, constituting 48.6 percent of the total elderly cohort in Indonesia (Ananta et al., 2005). According to Ananta et al. (2005), the pace of ageing of the Yogyakarta population was relatively high, with a rise of more than 2 percentage points over the last two decades. Yogyakarta province is a frontrunner in the ageing process and can be categorized as "the oldest population in Indonesia", as the percentage of the older population in the region is more than 12 percent (Arifin & Ananta, 2016; Keasberry, 2001). Hull and Dasvarma (1988) found that the province of Yogyakarta had the lowest fertility level of any Indonesian province.

Giriasih is a selected village in Yogyakarta where the community can be categorized as a "super-old population". The proportion of older persons is 20 percent in 2010, which higher than the young adult cohort at 13.1 percent (Figure 2.1, p.17). The relatively small proportion of young adults arises from the high levels of outmigration of young people. More than half of grown-up children have migrated out of the village.

Giriasih is located in Purwosari Sub-District Gunung Kidul District. It is around 5 kilometres from Parang Tritis beach, a well-known tourist area in Yogyakarta. Some of the

people, mainly the young, work on the beach in waitressing jobs or as parking officers. Giriasih is situated in a highland and mountainous region where the arid land provides limited agricultural possibilities (Picture 2.5).



Picture 2.5: Arid area in Giriasih (Photo taken on 29/12/2016)





Water is very scarce. Therefore, most people buy water for their daily needs. The community settlement is spread across the village. Most houses are constructed in traditional Javanese fashion. The community settlement and plantation rise on the hillsides in terraces (Map 2.4). Most of the people are farmers in community plantations such as cornfields, teak woods (*jati*), acacia, coconut and *sengon* (Albizia) plantations. People also cultivate cassava on dry fields (*tegalan*). Only a small number of areas can be used for rice. Almost all farmers in the village have livestock such as cows and goats.



Picture 2.6: Activity in *Poskesdes* Giriasih (Photo taken on 29/09/2015)



Picture 2.7: *Puskesmas Santun Lansia* in Purwosari Sub-District, Gunung Kidul (Photo taken on 29/09/2015)

The village has the normal public facilities such as schools, village offices and a village health center (*Pusat Kesehatan Desa-Poskesdes*). In the health center, a midwife and nutrition staff are available (Picture 2.6). The *Poskesdes* is also used as an office for the *Desa Siaga* Program aimed to promote the ability and capacity of community members to deal with health problems, disasters and other emergencies. The program provides health services for children, mothers and older people. The nearest community public health service is located

around 3 km from the village. The health service runs what is known as the friendly environment program for the elderly (*Puskesmas Santun Lansia*). The health center provides a special room for service delivery for elderly people that includes promotive, preventive, curative, and rehabilitative health services (Picture 2.7).

Although the health facilities are relatively well established in the village, the poverty rate in the village is the highest among the research sites (Table 2.1). The poverty in the village is more than five times that of Cacaban (15.7 percent VS 2.8 percent). One contributory factor to poverty is the scarcity of water resources, particularly during the dry season. During the rainy season, the people usually collect and save as much water as possible for later use during the dry season (Picture 2.8).



Picture 2.8: Big barrel used to collect water during the rainy season (Photo taken on 29/01/2017)

The majority of the population adheres to Islam and most of them are affiliated to Muhammadiyah, the second largest Islamic civil society in Indonesia. It can be categorized as a relatively modernist Islamic organisation, established in 1926 in Yogyakarta itself. A small number of villagers is however affiliated to Nahdatul Ulama. A very small number particularly the elderly, practice "*islam kejawen*" (Javanese-style Islam).

As is conventional among the Javanese, the kinship system in Giriasih is a bilateral system that is generally characterized by the values of showing respect (*hormat*) and maintaining social harmony (*rukun*) particularly toward older people and senior kin (H. Geertz, 1989; Koentjaraningrat, 1957). In contrast with a patriarchal kinship system, there is no descent preference in a bilateral system and familial descent is regarded as equal between

male and female. Women are respected in Javanese culture and often have a high degree of autonomy.

4. Bugoharjo, Lamongan District, East Java Province

East Java is another home province of the Javanese and they constitute about 74 percent of its population (Ananta et al, 2005). East Java province can be categorized as a "transitional population" where the proportion of elderly was 10.4 percent of the total population in 2010 (Ananta et al. 2016). Bugoharjo itself can be categorized as a "super-old population", as the proportion of older persons is 24 percent in 2010, much higher than the young adult (8 percent) cohort and the highest among the surveyed villages (Figure 2.1, p.17). This figure reflects the very high number of outmigration of young people, at 76.3 percent. Those young people mostly have gone to work as street vendors in big cities such as Surabaya, Yogyakarta and Jakarta. Street vendors from Lamongan are very well-known in Indonesia, where they are known as "*Soto Lamongan*" (Lamongan soup) and "*Pecel Lele Lamongan*" (Catfish *Pecel*). Indeed, the symbol of the Lamongan District is the catfish.



Picture 2.9: Fishponds and rice fields surrounding the village (Photo taken on 5/02/2017)

The village is situated in lowland and flat areas where the houses are clustered in one place surrounded by wet-rice cultivation and fishponds (Picture 2.9). The settlement is tremendously dense and even resembles urban settlement patterns (Map 2.5). Many of the house styles are urban fashion as many of the young adults who make a living in the cities have built a modern house for their parents. Homes constructed of locally made bricks are increasingly common, especially among the wealthier families.



Map 2.5: Community settlement of Bugoharjo



Picture 2.10: *Istighosah* activity among women in Bugoharjo (Photo taken on 18/09/2016)

The majority of the people are farmers and fishmongers. The area has a plentiful water supply, and many of the farmers replace their rice fields with fishponds as they are more economically profitable. However, a lot of water resources cannot be used to fulfil the daily needs of the community, particularly for drinking as the water has high salinity levels. Therefore, most of the people in the village buy water to cook and drink while for taking a bath, they use the well water which contains a high salt.

This village is a Muslim village affiliated to Nahdatul Ulama. Therefore, community gatherings to practice Islamic rituals are prevalent such as *"istighosah"* and *"tahlilan"*. *Istigosah*

and *tahlilan* are religious activities to pray for families who have passed away (Picture 2.10). Although Bugoharjo is the second poorest village in the surveyed localities, with poverty levels at just over 14 percent (Table 2.1), the mosque as a symbol of Islam in the village is huge and artistic. Most of the mosques in the Lamongan are surprisingly large and artistic, and much more luxurious than in the other surveyed districts. This phenomenon might reflect the particular nature of Islam in East Java, particularly Lamongan as a "city of Islamic students and Islamic guardians" (*"Kota santri and wali*").

5. Rejoagung, Jember District, East Java Province

Rejoagung is a selected Javanese village in Semboro sub-district, Jember District, East Java. Rejoagung is near the regional urban centre in Tanggul sub-district. Like other Javanese, the kinship system in Rejoagung is a bilateral system. It can be categorized as an "old village" as the percentage of older persons was 16.4 percent in 2010. This village is unique, as almost 100 percent of the population is Christian, whereas the nearby villages are all Muslim. As a Christian village surrounded by Muslim communities, one of the local customs aimed at maintaining their Christian identity is a ban on the sale of their land to outsiders.



Map 2.6: Well-ordered community settlement of Rejoagung

Rejoagung is located in flat terrain where the houses are clustered in one location. The community is surrounded by rice paddies and orange plantations that spread across the flatland. Map 2.6 shows the community settlement of Rejoagung. Each house faces the road and has a yard and the community settlement looks neat and well ordered. Oranges from the village are well-known across Indonesia as "*jeruk semboro*" (orange from Semboro) (Picture

2.11). Over the years, many farmers have replaced their rice fields with orange plantations as they are more beneficial economically.



Picture 2.11: An elderly farmer in his orange plantation (Photo taken on 03/03/2017)

Rejoagung has been awarded the title of the best village in Jember District and it often represents the district in village competition at the provincial level. One reason for this distinction is the orderly and well-structured nature of the community settlement. Houses are well separated with every home facing the main road, each house having a large and neat front yard, many of which are used for fruit cultivation. Fruit has consequently become one of the primary income sources of the village. The community uses wells as a source of water.

The poverty rate in the village is relatively low at just over 6 percent. However, the proportion of outmigration of grown children is high at 60.7 percent. The nearest community public health facility is three kilometres from the village. However, a *Poskesdes* is available in the village, and is managed by a midwife and two health staff.

6. Gunung Sari, Buleleng District Bali province

Bali is the home province for Balinese where the majority of people are adherents of Hinduism. The rate of the elderly in Bali was relatively high at 9.8 percent (transitional population) in 2010. Gunung Sari was the selected village in Bali where the percentage of older persons constituted 19.1 percent of total population (old population) (Figure 2.1, p. 17).



Map 2.7: Community settlement of Gunung Sari village surrounded by plantations and rice fields



Picture 2.12: An elderly man climbing a coconut tree on his farm (Photo taken on 5/03/2017)

Gunung Sari has fertile soil with rice fields, cloves, coconuts, bananas and *durian* plantations spread across the village where terraced fields rise on the hillsides. The community settlement is quite crowded (Map 2.7). Many people in the communities rely on farming for a living. Older persons who are still active often prefer to work in plantations rather than rice fields as the work is not as hard.

Unlike farmer societies in other parts of Indonesia, in Gunung Sari and other parts of Bali, there is almost no connection between the ownership and management of cultivable land and the village government. *Subak* (the irrigation society) regulates all matters having to do with wet rice cultivation, and it is organizationally separate from the village government (C. Geertz, 1959). The community adopts a patrilineal kinship system along with the Hindu caste system. A strong patriarchal culture can be seen in the inter-caste marriage and inheritance system.

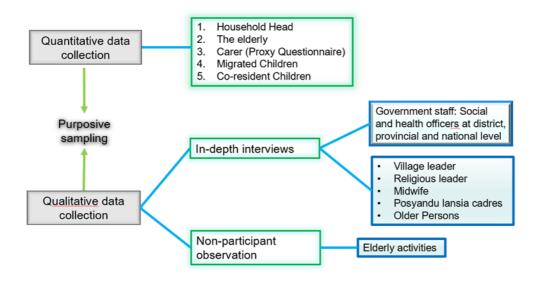
2.1.2 Data collection techniques

Nowadays, the research method is becoming increasingly interdisciplinary, complex, and dynamic. Therefore, there is a need to complement one approach with another. This study employed a mixed-methods approach combining quantitative and qualitative methods. Mixed methods research can be defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (R. B. Johnson & Onwuegbuzie, 2004, p. 17).

The data collection was led by Professor Peter MacDonald and Dr Iwu Dwisetyani Utomo. The data collection was conducted by seven universities including the University of North Sumatra, the University of Andalas, the University of Indonesia, State Islamic University of Syarif Hidayatullah Jakarta, State Islamic University Sunan Kalijaga Yogyakarta, Udayana University and Nusa Cendana University. Each university recruited a field coordinator assisted with one data entry staff and 15 to 25 enumerators. I was recruited by Professor McDonald and Dr Utomo as a field coordinator in 4 villages including Giriasih, Winong, Bugoharjo and Rejoagung.

The data was collected into three phases. The first phase was a pilot research project conducted in Giriasih, Winong and Salo from September to October 2015. In this phase I was involved as a field coordinator in the village of Giriasih and Winong. In this phase, I joined McDonald and Utomo in collecting quantitative and qualitative data. The second phase was data collection conducted in seven villages including Muara, Sikulan, Cacaban, Bugoharjo, Rejoagung, Gunung Sari and Sei. In this phase, I was a field coordinator in two villages, Bugoharjo and Rejoagung. The data collection in the second phase was conducted from September to October 2016. The third phase was qualitative data collection conducted from December 2016 to March 2017. For the third phase, I collected the data by myself to enrich the data for my thesis. For the purpose of analysis, I collected the data only in six villages including Muara, Cacaban, Giriasih, Bugoharjo, Rejoagung and Gunung Sari. The data collected within these three phases is called "2016 Ageing in Rural Indonesian Survey-ARIS".





Source: The 2016 Ageing in Rural Indonesian Survey

Three main methods were employed in data collection, including surveys, in-depth interview and non-participant observation as can be seen in Figure 2.2. Figure 2.2 describes the very comprehensive data collection. From my observation, up to now there has been no study collecting data from various sources of information from village governments, local governments, provincial and central governments. This survey also assembled data from various sources including older persons; migrated children; children living with their elderly parents; local and religious leaders; health cadres, and government officers from village to central government. The data collection methods are also very comprehensive including surveys, in-depth interviews and non-participant observation. The sections below describe the detail of each data collection technique.

2.1.2.1 Surveys

The survey is widely regarded as representing an inherently quantitative and positivistic approach. The quantitative survey is often described as being "sterile and unimaginative" but it is well suited to provide certain types of factual and descriptive information (De Vaus, 2002). The present survey was carried out using a questionnaire and face-to-face structured Interviews with household heads, older persons, older people's spouses, and co-resident and migrated children. The questionnaire consisted of six parts. The first part is a household questionnaire (Questionnaire A) posed to head of household. The information gained through

this part relates to basic information about all household members, house characteristics, quality of housing, household assets, incomes, expenditures and social services received.



Picture 2.13: The interview process conducted by an enumerator with an elderly woman (Photo taken on 28/09/2015)



Picture 2.14: The process of data collection on blood pressure conducted by midwife and health cadres (Photo taken on 25/09/2016)

The second part is a questionnaire posed to older persons (60+) and their spouses at age 50 and over (Questionnaire B). The information gained through this part relates to demographic characteristics of the elderly subject, spouse characteristics, personal income and assets, demographic characteristics of their children, characteristics of their parents,

mobility, in-depth information on health – both physical and mental health and the use of health services; food consumption; community and social participation; material and emotional exchanges between the older person and their children. Picture 2.13 describes the process of data collection to an older person conducted by an enumerator.

The third is a proxy questionnaire (Questionnaire C) posed to the carer of older persons who are not able to be interviewed because of illness or an inability to speak or listen. The information gathered was similar to the second questionnaire. The number of questions is shorter than the second questionnaire. The fourth (Questionnaire D) and fifth (Questionnaire E) parts are posed to co-resident and migrated children respectively. The information gained through this part relates to the demographic characteristics of the children, parents' health and types of intergenerational support. The last questionnaire (Questionnaire F) is information about objective blood pressure and body mass index (BMI) of older people. These data were collected by professional health officers such as midwives and health cadres. To collect the data, all health professionals were provided with the same tools across villages with the aim of gaining qualified and robust data. The blood pressure was recorded three times. Picture 2.14 describes the process of data collection on BMI and blood pressure conducted by midwives and health cadres. The midwife measures the blood pressure and the health cadres and volunteers record the data.



Picture 2.15: Enumerators Training in State Islamic University Sunan Kalijaga leaded by Principal Investigator (photo taken on 25/09/2015)

All of the questionnaires were developed by McDonald and Utomo. The design of those questionnaires was discussed with all team members, and particularly with all field coordinators and data input staff to adjust to the local context. Adjusting to the local context is

very important as the cultural background of older people varies particularly on religious rituals and community institutions which older people might be involved with.



Picture 2.16: Enumerators are practising interviews and sharing their experience after a pilot test interview (photo taken on 25/09/2015)

The data collection mostly used local languages as many older persons cannot speak the national language (Bahasa Indonesia). Therefore, the enumerators were selected based on their capacity to understand and speak the local language. Before data collection, all enumerators were trained on the design of the survey, the questionnaires (Picture 2.15) and practising data collection in each research site (pilot test). All enumerators were required to practice interviews with the elderly, and their experience was shared in the training (Picture 2.16).

Villago	Respondents								
Village Name	Household Head	Elderly	Elderly Proxy	Co-resident Children	Migrated Children				
Muara	168	203	12	48	37				
Cacaban	250	331	37	51	20				
Giriasih	187	237	9	48	33				
Bugoarjo	235	268	39	52	19				
Rejoagung	253	318	21	48	44				
Gunungsari	226	288	42	51	50				
Total	1,319	1,645	160	298	203				

Table 2.2: The number of respondents by village

Source: The 2016 Ageing in Rural Indonesia Survey (ARIS).

The total sample size in this survey was 3,625 people consisting of 1,319 household heads, 1,645 elderly, 160 ill elderly, 298 children who co-reside with their parents, and 203 children who had migrated to the cities (Table 2.2).

2.1.2.2 In-depth interview

The qualitative interview is regarded as a guided conversation where an interviewer and interviewee interact for a meaning-making purpose (Warren, 2002). An in-depth interview is often regarded as an appropriate approach to describe real-life people and situations as well as to make sense of behaviour and understand behaviour within its wider context (De Vaus, 2002). An in-depth interview is also considered an appropriate method of exploring people's experience in depth and it is suitable with the purpose of this research to examine the experience of older people (Grbich, 2012). In-depth interviews were conducted through key informants using a semi-structured interview. Open-ended questions were employed to explore respondent perceptions and experience on the topic (Minichiello, Aroni, Timewell, & Alexander, 1995). This method is beneficial in allowing the respondent to share information openly, express opinions freely, where respondents are not forced into a predetermined category and are provided an opportunity to provide further information when needed (Drummond, 2005; Henn, Weinstein, & Foard, 2005). The researcher used purposive sampling as the participants have rich information on the topic (Babbie, 2015).

An interview guide was developed before data collection and used in the interview process (See attached Appendix 1). However, the questions asked are flexible and modifiable, depending on the situation and the needs; otherwise, the interview would lose its depth. The in-depth interview used structured questions in some limited contexts, for example, when asking for demographic information. Moreover, during the interview, the researcher used verbal communication as well as non-verbal communication through eye contact and body language. Thematic analysis was employed to identify and analyse patterns (themes) within the data (Douglas, 2002; Liamputtong & Ezzy, 2005). The verbatim data were transcribed, coded and grouped into some categories using the NVivo software program.

132 key informants were interviewed including the elderly, midwives, local leaders and government staff. All key informants were recruited by purposive sampling as the participants have rich information on the topic (Babbie, 2015). Purposive sampling uses expert judgement in selecting cases (Neuman, 2011). The purpose of this study and the methods of data collection were explained to all participants before interviews and observation. The participants were also informed about the utilization of data, how the confidentiality of the information given during the interviews would be protected, and there was no pressure for respondents to participate in this study. The respondents' consent to participate was sought in each case. The respondents' consent indicated that the respondent permitted the researcher to gather data for research purposes only and understood that the data could be shared and published. The respondents had the right to withdraw their participation anytime when the need arose. The identity of participants was also held in confidence and would remain secret from the public.

Moreover, the researcher would maintain anonymity if any comments by participants were quoted.

No	Case Number	Date	Name	Sex	Institutions
1	M133JS	17/10/2015	Joni	Male	Ministry of Social Affairs
2	M135JB	17/10/2015	Anwari	Male	BKKBN
3	M136JK	18/10/2015	Jaka	Male	Komnas Lansia

 Table 2.3: Key Informants from Central Government Institutions

Source: The 2016 Ageing in Rural Indonesia Survey. Note: Names of key informants are anonymous

The key informants were categorized into four groups. The first was the key informants from central government institutions responsible social welfare programs for the elderly, including the Ministry of Social Affairs; National Family Planning Board (*BKKBN-Badan Kependudukan dan Keluarga Berencana Nasional*); and National Council for Older People (*Komnas Lansia*). Three key informants were interviewed, representing each of the government institutions (Table 2.3). Interviews included program designs, beneficiaries, coverage, program beneficiary's selection, budget and challenges in program implementation.

No	Case	Date	Name	Sex	Institutions		
	Number						
1	M9GKP	9/02/2017	Adi	Male	District Social Office of Gunung Kidul		
2	M10GP	9/02/2017	Man	Male	District Social Office of Gunung Kidul		
3	M11GKP	9/02/2017	Arif	Male	CCT Staff of Gunung Kidul Office		
4	M78LT	16/09/2016	Mara	Male	Head of Community Health Centre of Lamongan		
5	M79LD	16/09/2016	Muaz	Male	Social Office Head of Lamongan		
6	M88GKP	2/10/2015	Ucup	Male	Community Health Centre head of Gunung Kidul		
7	F90GKD	5/10/2015	Gita	Female	Health Office of Yogyakarta		
8	F91GKD	5/10/2015	Hanio	Female	Social Office of Yogyakarta		
9	M92GKP	8/10/2015	Satem	Male	Aged Care of Yogyakarta		
10	M96JD	20/09/2016	Mas	Male	BKKBN of Jember		
11	M101JD	20/09/2016	Jaka	Male	Social Office of Jember		
12	M104SD	14/09/2016	Usup	Male	BKKBN of Sumedang		
13	F105SD	14/09/2016	Nike	Female	Health Office of Sumedang		
14	M106SD	14/09/2016	Otong	Male	Social Office of Sumedang		
15	M115BD	20/09/2016	Majot	Male	BKKBN of Buleleng		
16	M117MD	8/09/2016	Rajo	Male	BKKBN of Tapanuli Utara		
17	F118MD	8/09/2016	Titi	Female	Health Office of Tapanuli Utara		
18	M119MD	8/09/2016	Tata	Male	Social Office of Tapanuli Utara		
19	M126ML	8/09/2016	Heri	Male	Aged Care of Tapanuli Utara		
20	F127MD	7/09/2016	Juliet	Female	Community Health Centre of Tapanuli Utara		
21	F128SD	27/02/2017	Hanum	Female	Province Health Office of East Java		

Table 2.4: Key Informants from Local Government Institutions

No	Case Number	Date	Name	Sex	Institutions
22	M129SD	27/02/2017	Heru	Male	BKKBN of East Java
23	M130SD	28/02/2017	Anjas	Male	Elderly Commission of East Java
24	M131SD	28/02/2017	Candra	Male	Province Social Office of East Java
25	F136YD	16/03/2018	Yeni	Female	Social Worker of PKH program
26	F137BD	28/09/2016	Putu	Female	Head of Sririt Community Health Centre
27	M138BD	28/09/2016	Wayan	Male	Doctor in Sririt Community Health Centre
28	F139LP	16/09/2016	Nanik	Female	Older persons health staff at community health centre Lamongan

Source: The 2016 Ageing in Rural Indonesia Survey. Note: Names of key informants are anonymous

The second category comprised key informants from provincial, districts and sub-district government institutions implementing welfare programs for the elderly, including health offices, social offices, the family planning and women empowerment board and the community health centre (*Puskesmas*). There were 28 key informants interviewed (19 men and 9 women) representing various provincial and district government institutions (Table 2.4). The interviews aimed to investigate the situation of the elderly, their problems and needs, and social welfare programs for the elderly and the policy challenges involved.



Picture 2.17: The process of interviewing a midwife and paramedic (photo taken on 18/09/2016)

The third category was key informants from the village apparatus (the village head and staffs) and community leaders including religious leaders, local figures, women leaders, midwives and cadres. 35 key informants (12 women and 23 men) participated in the study. More men than women local leaders participated, reflecting the cultural norms in rural areas in which men are commonly leaders in public spheres (Table 2.5). All village heads, village 40

secretaries and religious leaders interviewed were men while all midwives and health cadres were women. The interviews were aimed at investigating the cultural aspects, habits, social norms, customs, the roles of formal and informal supports and their obstacles in providing those supports. Picture 2.17 shows an example of data collection from a midwife and paramedic (*mantri*).

	Case Number	Date	Name	Sex	Position
1	M1GKT	27/12/2016	Joko	Male	Village Head of Giriasih
		29/09/2015	Joko	Male	Village Head of Giriasih
2	M5GKT	18/01/2017	Bar	Male	Village Secretary of Giriasih
		22/03/2017	Bar	Male	Village Secretary of Giriasih
3	M16ST	16/02/2017	Aa	Male	Social Welfare Head of Cacaban
4	M17ST	17/02/2017	Aji	Male	Village Secretary of Cacaban
5	F20ST	18/02/2017	Atun	Female	Local Leader of Cacaban
6	M28LT	4/02/2017	Anwar	Male	Village Head of Bugoharjo
		17/09/2016	Anwar	Male	Village Head of Bugoharjo
7	M30LT	4/02/2017	Iman	Male	Paramedic of Bugoharjo
8	M31LT	5/02/2017	Hari	Male	Local Leader of Bugoharjo
9	F40BT	6/02/2017	Nana	Female	Female Leader of Gunung Sari
10	M42BT	7/02/2017	Sono	Male	Local Leader of Gunung Sari
11	M49TT	16/03/2017	Jaim	Male	Village Head of Huto Lotung (Muara)
		7/09/2016	Jaim	Male	Village Head Huto Lotung (Muara)
12	M53TT	17/03/2017	Raja	Male	Village Head of Silali Toruan (Muara)
		7/09/2016	Raja	Male	Village Head of Silali Toruan (Muara)
13	M56JT	2/03/2017	Indra	Male	Sub-Village Head of Rejoagung
14	M62JT	3/03/2017	Tono	Male	Priest of Rejoagung
15	M63JT	3/03/2017	Salam	Male	Local Leader of Rejoagung
16	M74BT	9/03/2017	Pangku	Male	Village Head of Gunung Sari
17	F77LB	17/09/2016	Rufah	Female	Midwife of Bugoharjo
18	F82GKK	30/09/2015	Anah	Female	Cadre of Giriasih
19	F83GKB	1/10/2015	Kiki	Female	Midwife of Giriasih
20	F84GKK	1/10/2015	Fitri	Female	Cadre of Giriasih
21	M85GKT	1/10/2015	Torik	Male	Social Worker of Giriasih
22	M86GKP	1/10/2015	Asep	Male	Paramedic of Giriasih
23	F87GKK	1/10/2015	Uffah	Female	Cadre of Giriasih
24	F95JB	19/09/2016	Imas	Female	Midwife of Rejoagung
25	M97JT	19/09/2016	Harap	Male	Village Head of Rejoagung
26	F103SB	13/09/2016	Hannah	Female	Midwife of Cacaban
27	M107ST	13/09/2016	Jelan	Male	Village Head of Cacaban
28	M108ST	13/09/2016	Jilan	Male	Local Leader of Cacaban
29	M113BT	20/09/2016	Dede	Male	Local Leader of Gunung Sari
30	F114BT	20/09/2016	Ayuni	Female	Social welfare staff of Gunung Sari

Table 2.5: Key Informants from village apparatus and local leaders

No	Case Number	Date	Name	Sex	Position
31	F116MB	7/09/2016	Anggun	Female	Midwife of Muara
32	M121MT	7/09/2016	Maman	Male	Village Head of Bariba Naek (Muara)
33	F132LT	17/09/2017	Arum	Female	Cadre of Bugoharjo
34	M134JT	3/03/2017	Dandy	Male	Local Leader of Rejoagung
35	M135TT	16/03/2017	Dun	Male	Young Leader in Tapanuli Utara

Source: The 2016 Ageing in Rural Indonesia Survey. Note: Names of key informants are anonymous

The fourth group was the older persons themselves. Using a purposive sampling approach, 72 elderly men and women were recruited from six communities. More elderly women (43) than men (29) participated in this study (Table 2.6). The older persons were selected based on their living arrangements, to gain in-depth information on their experience of being old in an ageing societies, particularly their daily activities; living arrangements; care provisions; participation in community activities; employment history; personal income; networking; support systems; the meaning of being old; perceptions of problems, needs and life priorities; personal perceptions about likes and dislikes about ageing; the most important aspects to pursue and avoid; stressful and happiest life events; good and bad things in old age; changing behaviour; coping strategies to solve daily hardships; and roles and status of the elderly. The interviews were conducted with older persons who lived alone, lived with spouse only, lived with children, and lived with grandchildren only. Interpreters assisted the researcher as many key informants only speak a local language.

No	Case Number	Date	Name	Sex	Age
1	M2GKS	27/12/2016	Sono	Male	66
	M2GKS	4/01/2017	Sono	Male	66
	M2GKS	20/01/2017	Sono	Male	66
2	M3GKS	4/01/2017	Yono	Male	80
3	F4GKI	4/01/2017	Atun	Female	88
4	M5GKT	18/01/2017	Amin	Male	64
	M5GKT	20/01/2017	Amin	Male	64
	M5GKT	22/03/2017	Amin	Male	64
5	M7GKS	20/01/2017	Gus	Male	86
6	M8GKD	21/01/2017	Yadi	Male	85
7	F12GKJ	22/03/2017	Inah	Female	75
8	M13GKD	22/03/2017	Jaki	Male	63
9	F14GKJ	22/03/2017	Inem	Female	75
10	M15GKS	29/01/2017	Manan	Male	66
11	M18ST	17/02/2017	Tong	Male	60
12	F19SI	17/02/2017	Mana	Female	74
13	M21SS	18/02/2017	Aki	Male	80

Table 2.6: The detail of olde	r people respondents
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14 F22SI 18/02/2017 Ita Female 65 15 F23SI 18/02/2017 Arti Female 90 17 M2SSD 18/02/2017 Akik Male 90 17 M2SSD 18/02/2017 Bahar Male 70 18 F26SI 19/02/2017 Asih Female 72 19 F27SJ 19/02/2017 Anwari Male 62 21 F32LJ 5/02/2017 Anah Female 73 22 M33LS 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Soun Male 80 29 F41BJ 7/02/2017 Nani Female 76 31 M44TD 16/03/2017 Amir Male 81 20 F41BJ 16/03/2017 Amir Male 81 32	No	Case Number	Date	Name	Sex	Age
16 M24SS 18/02/2017 Akik Male 90 17 M25SD 18/02/2017 Bahar Male 70 18 F26SI 19/02/2017 Toy Female 72 19 F27SJ 19/02/2017 Asih Female 72 20 M29LT 4/02/2017 Anwari Male 62 21 F32LJ 5/02/2017 Anah Female 73 22 M33LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Atikah Female 82 25 F36LI 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Nani Female 62 30 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Amar Male 81 32 <td>14</td> <td>F22SI</td> <td>18/02/2017</td> <td>Ita</td> <td>Female</td> <td>65</td>	14	F22SI	18/02/2017	Ita	Female	65
17 M25SD 18/02/2017 Bahar Male 70 18 F26SI 19/02/2017 Toy Female 72 19 F27SJ 19/02/2017 Asih Female 72 19 F27SJ 19/02/2017 Anwari Male 62 21 F32LJ 5/02/2017 Johan Male 85 22 M33LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Anah Female 82 26 M37LS 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Sari Female 62 30 F43TJ 16/03/2017 Fani Female 76 34 F47TJ 16/03/2017 Amar Male 81 32 M45TS 16/03/2017 Amar Male 70 35	15	F23SI	18/02/2017	Arti	Female	
18 F26SI 19/02/2017 Toy Female 72 19 F27SJ 19/02/2017 Asih Female 20 M29LT 4/02/2017 Anwari Male 62 21 F32LJ 5/02/2017 Johan Male 85 22 M33LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Sari Female 82 26 M37LS 6/02/2017 Nari Male 80 29 F41BJ 7/02/2017 Nari Male 81 30 F43TJ 16/03/2017 Amir Male 81 31 M44TD 16/03/2017 Amir Male 81 33 F46TI	16	M24SS	18/02/2017	Akik	Male	90
19 F27SJ 19/02/2017 Asih Female 20 M29LT 4/02/2017 Anwari Male 62 21 F32LJ 5/02/2017 Ijah Female 73 22 M33LS 5/02/2017 Johan Male 85 23 F34LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Sari Female 76 31 M44TD 16/03/2017 Nani Female 76 31 M44TD 16/03/2017 Amar Male 81 32 M45TS 16/03/2017 Amar Male 70 35 F48TJ 16/03/2017 Fitri Female 76 34 F47TJ	17	M25SD	18/02/2017	Bahar	Male	70
20 M29LT 4/02/2017 Anwari Male 62 21 F32LJ 5/02/2017 Ijah Female 73 22 M33LS 5/02/2017 Johan Male 85 23 F34LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Jaki Male 80 29 F41BJ 7/02/2017 Nani Female 76 31 M44TD 16/03/2017 Fani Female 76 31 M44TD 16/03/2017 Amar Male 81 32 M45TS 16/03/2017 Amar Male 70 35 F48TJ 16/03/2017 Farah Female 70 35	18	F26SI	19/02/2017	Тоу	Female	72
21 F32LJ 5/02/2017 Ijah Female 73 22 M33LS 5/02/2017 Johan Male 85 23 F34LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Savi Female 70 28 M39LD 6/02/2017 Jaki Male 80 29 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Amar Male 70 35 F48TJ 16/03/2017 Fitri Female 70 36 F50TJ 16/03/2017 Andi Male 81 37	19	F27SJ	19/02/2017	Asih	Female	
22 M33LS 5/02/2017 Johan Male 85 23 F34LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Fani Female 62 30 F43TJ 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Aini Female 76 34 F47TJ 16/03/2017 Aini Female 70 35	20	M29LT	4/02/2017	Anwari	Male	62
23 F34LS 5/02/2017 Anah Female 64 24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Nari Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Amar Female 76 34 F47TJ 16/03/2017 Sinta Female 70 35 F48TJ 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Andi Male 81 38	21	F32LJ	5/02/2017	ljah	Female	73
24 M35LD 5/02/2017 Man Male 85 25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Rani Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amir Male 72 33 F46TI 16/03/2017 Quin Female 76 34 F47TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Andi Male 81 38	22	M33LS	5/02/2017	Johan	Male	85
25 F36LI 6/02/2017 Atikah Female 82 26 M37LS 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Jaki Male 80 29 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Fani Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 70 35 F46TI 16/03/2017 Sinta Female 70 35 F48TJ 16/03/2017 Sinta Female 83 36 F50TJ 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41	23	F34LS	5/02/2017	Anah	Female	64
26 M37LS 6/02/2017 Soun Male 86 27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Jaki Male 80 29 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Fani Female 62 30 F43TJ 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Quin Female 76 34 F47TJ 16/03/2017 Nata Female 70 35 F48TJ 16/03/2017 Sinta Female 83 37 M51TS 16/03/2017 Asih Female 83 37 M51TS 16/03/2017 Asih Female 78 39 M54JS 2/03/2017 Asih Female 70 40	24	M35LD	5/02/2017	Man	Male	85
27 F38LJ 6/02/2017 Sari Female 70 28 M39LD 6/02/2017 Jaki Male 80 29 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Fani Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Quin Female 76 34 F47TJ 16/03/2017 Sinta Female 70 35 F48TJ 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Mami Male 64 41 M57JS 2/03/2017 Jaki Male 68 42	25	F36LI	6/02/2017	Atikah	Female	82
28 M39LD 6/02/2017 Jaki Male 80 29 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Fani Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Quin Female 76 34 F47TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 74 41 M57JS 2/03/2017 Jari Male 64 41	26	M37LS	6/02/2017	Soun	Male	86
29 F41BJ 7/02/2017 Nani Female 62 30 F43TJ 16/03/2017 Fani Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Amar Male 70 35 F48TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asin Female 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Mami Female 64 42 M58JD 2/03/2017 Jari Male 64 43	27	F38LJ	6/02/2017	Sari	Female	70
30 F43TJ 16/03/2017 Fani Female 76 31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Farah Female 76 34 F47TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Sinta Female 83 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Inaz Female 71 45 <td>28</td> <td>M39LD</td> <td>6/02/2017</td> <td>Jaki</td> <td>Male</td> <td>80</td>	28	M39LD	6/02/2017	Jaki	Male	80
31 M44TD 16/03/2017 Amir Male 81 32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Farah Female 76 34 F47TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Andi Male 81 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Jaki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Inaz Female 71 45	29	F41BJ	7/02/2017	Nani	Female	62
32 M45TS 16/03/2017 Amar Male 72 33 F46TI 16/03/2017 Farah Female 76 34 F47TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Fitri Female 83 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Juki Male 64 43 F59JI 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Murni Female 65 47 <td>30</td> <td>F43TJ</td> <td>16/03/2017</td> <td>Fani</td> <td>Female</td> <td>76</td>	30	F43TJ	16/03/2017	Fani	Female	76
33 F46TI 16/03/2017 Farah Female 76 34 F47TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Fitri Female 83 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Juki Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Inaz Female 65 47 F65BI 7/03/2017 Murni Female 65 48 <td>31</td> <td>M44TD</td> <td>16/03/2017</td> <td>Amir</td> <td>Male</td> <td>81</td>	31	M44TD	16/03/2017	Amir	Male	81
34 F47TJ 16/03/2017 Quin Female 70 35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Fitri Female 83 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Juki Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Inaz Female 65 47 F65BI 7/03/2017 Murni Female 62 49	32	M45TS	16/03/2017	Amar	Male	72
35 F48TJ 16/03/2017 Sinta Female 62 36 F50TJ 16/03/2017 Fitri Female 83 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Juki Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Inaz Female 65 47 F65BI 7/03/2017 Murni Female 62 48 F66BJ 7/03/2017 Anis Female 65 51	33	F46TI	16/03/2017	Farah	Female	76
36 F50TJ 16/03/2017 Fitri Female 83 37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Inaz Female 65 47 F65BI 7/03/2017 Murni Female 63 48 F66BJ 7/03/2017 Anis Female 65 51 M67BS 7/03/2017 Ninik Female 65 52	34	F47TJ	16/03/2017	Quin	Female	70
37 M51TS 16/03/2017 Andi Male 81 38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Ifah Female 71 45 F61JJ 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Murni Female 65 47 F65BI 7/03/2017 Murni Female 62 49 M67BS 7/03/2017 Anis Female 65 51 M69BS 7/03/2017 Nyoman Male 65 52	35	F48TJ	16/03/2017	Sinta	Female	62
38 F52TJ 17/03/2017 Asih Female 78 39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Ifah Female 71 45 F61JJ 3/03/2017 Inaz Female 65 47 F65Bl 7/03/2017 Ketut Female 63 48 F66BJ 7/03/2017 Anis Female 62 49 M67BS 7/03/2017 Ninik Female 65 51 M69BS 7/03/2017 Ninik Female 65 52 F70BJ 7/03/2017 Nyoman Male 65 52	36	F50TJ	16/03/2017	Fitri	Female	83
39 M54JS 2/03/2017 Agung Male 70 40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Ifah Female 71 45 F61JJ 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Ketut Female 65 47 F65BI 7/03/2017 Murni Female 63 48 F66BJ 7/03/2017 Anis Female 62 49 M67BS 7/03/2017 Ninik Female 65 51 M69BS 7/03/2017 Nyoman Male 65 52 F70BJ 7/03/2017 Nyoman Male 62 54	37	M51TS	16/03/2017	Andi	Male	81
40 F55JI 2/03/2017 Mami Female 64 41 M57JS 2/03/2017 Juki Male 68 42 M58JD 2/03/2017 Jari Male 64 43 F59JI 3/03/2017 Ifa Female 74 44 F60JJ 3/03/2017 Ifah Female 71 45 F61JJ 3/03/2017 Inaz Female 71 45 F61JJ 3/03/2017 Inaz Female 65 47 F65Bl 7/03/2017 Ketut Female 63 48 F66BJ 7/03/2017 Anis Female 62 49 M67BS 7/03/2017 Anis Female 65 51 M69BS 7/03/2017 Ninik Female 65 52 F70BJ 7/03/2017 Nyoman Male 65 52 F70BJ 7/03/2017 Ayu Female 62 54	38	F52TJ	17/03/2017	Asih	Female	78
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48 F66BJ 7/03/2017 Anis Female 62 49 M67BS 7/03/2017 Jaka Male 67 50 F68BI 7/03/2017 Ninik Female 65 51 M69BS 7/03/2017 Nyoman Male 65 52 F70BJ 7/03/2017 Putu Female 73 53 F71BI 8/03/2017 Ayu Female 62 54 M72BI 8/03/2017 Bli Male 70 55 M73BS 8/03/2017 Made Male 64 56 F75LJ 17/09/2016 Tinah Female 95	46	F64BI	7/03/2017	Ketut	Female	65
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51 M69BS 7/03/2017 Nyoman Male 65 52 F70BJ 7/03/2017 Putu Female 73 53 F71BI 8/03/2017 Ayu Female 62 54 M72BI 8/03/2017 Bli Male 70 55 M73BS 8/03/2017 Made Male 64 56 F75LJ 17/09/2016 Tinah Female 95	49	M67BS	7/03/2017	Jaka	Male	67
52 F70BJ 7/03/2017 Putu Female 73 53 F71BI 8/03/2017 Ayu Female 62 54 M72BI 8/03/2017 Bli Male 70 55 M73BS 8/03/2017 Made Male 64 56 F75LJ 17/09/2016 Tinah Female 95						
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54 M72BI 8/03/2017 Bli Male 70 55 M73BS 8/03/2017 Made Male 64 56 F75LJ 17/09/2016 Tinah Female 95						
55 M73BS 8/03/2017 Made Male 64 56 F75LJ 17/09/2016 Tinah Female 95	53				Female	62
56 F75LJ 17/09/2016 Tinah Female 95						
	55					64
57 M76LS 17/09/2016 Amir Male 62	56	F75LJ	17/09/2016	Tinah	Female	95
	57	M76LS	17/09/2016	Amir	Male	62

No	Case Number	Date	Name	Sex	Age
58	F89GKL	4/10/2015	Gina	Female	
59	F93GKP	8/10/2015	Saritem	Female	
60	F94GKP	8/10/2015	Johanah	Female	
61	M98JT	19/09/2016	Agus	Male	70
62	F99JI	19/09/2016	Nisa	Female	64
63	F100JL	20/09/2016	Anisah	Female	78
64	F102SL	13/09/2016	Cicih	Female	
65	F109SL	13/09/2016	Erlin	Female	
66	F110BL	20/09/2016	lke	Female	
67	F111BL	20/09/2016	Ira	Female	71
68	M112BS	20/09/2016	Gung	Male	76
69	F123ML	7/09/2016	Hera	Female	
70	F124ML	7/09/2016	Sitanggang	Female	
71	F125ML	7/09/2016	Buet	Female	
72	F126GKS	22/03/2017	Imah	Female	80

Source: The 2016 Ageing in Rural Indonesia Survey. Note: Names of key informants are anonymous

After the data collection, the verbatim data was transcribed, coded and grouped into some categories using the NVivo software program. The transcripts were repeatedly read for familiarity and immersed with data. After that, inductive and deductive approaches to qualitative coding were adopted in searching for salient themes.

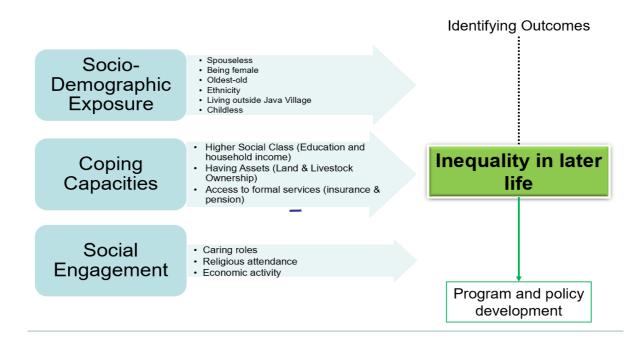
2.1.2.3 Observation

The observation was conducted to ascertain the conditions of the village environment and the availability of public facilities in every village. The observation was also aimed at getting a clear picture of the daily activities of the elderly and the environment surrounding their homes. Informal interviews with community members and older persons were also conducted during the observation. I followed several key informants as they went about everyday activities in public social settings such as attending cultural and religious services.

To strengthen the findings during the observation, photographs were taken to capture the details of situations and activities of the older people. Photos are often used as a starting point to explore the everyday life of vulnerable groups (Flick, 2018). The photographs were used as a basis for the ethnographic content analysis of the activities of older persons. This helps to understand the patterns and trends of words used, space and direction of images (Grbich, 2007; Liamputtong & Ezzy, 2005; Neuman, 2011) in gendering roles of men and women. Informed consent was asked for every photo taken and displayed in this study.

2.2 Analytical framework

Figure 2.3: Conceptual framework of factors associated with inequality in later life



Source: Developed by the researcher based on vulnerability in old age theories (Schröder-Butterfill & Marianti 2006) and social engagement framework (A. Utomo et al., 2019).

This research is an attempt to understand the life situation of older persons and their environment across socio-demographic groups, how their needs are being met and how to improve the existing system in fulfilling the needs of older people. Figure 2.3 describes the framework which attempts to reflect the interrelationship of factors associated with inequality in later life, including socio-demographic exposure, coping capacities and social engagement. Inequality in later life is the outcome variable, while socio-demographic exposure, social engagement and coping capacities are the explanatory variables. The unequal situation of older people indicates a need for targeted programs and social policy to reduce inequality and improve their wellbeing.

2.2.1 Outcome variable: inequality as a bad outcome

Hausman, McPherson, and Satz (2016) maintained that the concept of inequality is at the centre of moral theories. Inequality is a critical element of the ageing process as it is interrelated in complex ways. Bengtson and Settersten Jr (2016) stated that the term inequality might help to understand the importance of systemic mechanisms in how people become

stratified. Inequality is an inevitable outcome of stratification and differentiation of cohorts over time (O'rand, 2018). Inequalities refer to important differences in life experiences, the quality of life or well-being enjoyed by an individual, group, or population. Inequality is one part of diversity. The differences among individuals, groups, organizations, or nations can constitute a rich variety of talents, interests, expertise, or culture. However, when people have differences in opportunities, resources, rights, political access, life expectancy, or standard of living, for example, the appropriate term is inequality rather than diversity. The term diversity proposes a non-uniform distribution of something, while inequality implies a non-uniform distribution of something that matters either in a positive way (when access to or amount of that something provides advantage), or in a negative way (when exposure to or accumulation provides a disadvantage) (Uhlenberg, 2009).

Inequality is also often understood to be socio-economic, which is often based on income. Kerbo (1983) defines social inequality as "the condition whereby people have unequal access to valued resources, services, and positions in society" (p. 250). Warwick-Booth (2018) defines social inequalities as "differences in income, resources, power and status within and between societies" (p. 2). Inequality also can be defined as standards of living and level of wellbeing (Sen, 2001). Inequality can also be measured by social exclusion (Binelli, Loveless, & Whitefield, 2015). Social exclusion is often used to measure poverty and marginalization (Gilleard & Higgs, 2010). Social exclusion can be defined as "the lack or denial of resources, rights, goods and services and the inability to participate in the normal relationship and activities available to the majority of people in a society, whether in economic, social, cultural or political arenas" (Levitas et al., 2007, p. 86). Social exclusion refers to the rights of social citizenship including equal access to the labour market, to education, to health care, to the judicial system, to rights and decision-making and participation (Jehoel-Gijsbers & Vrooman, 2008).

Social exclusion has three domains (Jehoel-Gijsbers & Vrooman, 2008; Levitas et al., 2007). The first is resources including material and economic, access to services (both public and private), and social resources. Inadequate access to government services ('social rights') consists of a wide diversity of domains, including inadequate access to health care, housing, social services, and social security. The second is participation in economic activity (i.e. usually via work), social, education and political participation (i.e. voting). The third is quality of life, such as health, well-being, the environment and crime levels in the area in which you live.

The concept of inequality is related to vulnerability theory. Inequality measured by social exclusion or low quality of life is also used to understand vulnerability. Vulnerability is rooted in broader structural and temporal contexts. Vulnerability as an analytical concept first developed in the environmental sciences, particularly for the study of the impacts of natural

disasters. Vulnerability in disaster studies was defined as the 'potential for disruption or harm' (Wisner, 2013). Mackenzie, Rogers, and Dodds (2014) define vulnerability as "individuals or groups who are considered likely to be in need of special safeguards, supports, or services to protect them or enable them to protect themselves from certain harms" (p. 204). Therefore, vulnerability is often referred to a person or groups who are in some way disadvantaged such as 'poor', 'dependent', 'frail' or 'isolated' (Delor & Hubert, 2000; Russell, 1999; Wisner & Luce, 1993).

Schröder-Butterfill and Marianti (2006) referred to Chambers's (1989: 1) in defining vulnerability as 'the exposure to contingencies and stress, and difficulty coping with them, provides elements of such an account by giving equal weight to the threat and to the ability of an exposed subject to cope with that threat'. Based on this definition, vulnerability is a bad outcome in old age. Similarly, Mackenzie et al. (2014) argue that being vulnerable means being more likely to experience the bad things that can happen to people. Albert I Hermalin et al. (2002) in their study on vulnerability among older people in East and Southeast Asia identified bad outcomes as disadvantages.

To identify the inequality, it is important to identify first the perception of older people of the outcomes they seek to pursue and avoid during old age. Identifying what people say is powerful because identifying how people think is a key in developing more effective and strategic policy (Lindland, Fond, Haydon, & Kendall-Taylor, 2015a). Schröder-Butterfill and Marianti (2006) argue that in analyzing the vulnerability and situation of older people, it is important first to identify the bad outcomes that older people seek to avoid and are worried about. This approach is essential as judging people as vulnerable and in need of services brings the risks of overriding their priorities, even resulting in their disempowerment. Kaufman (1994), for instance, found that older persons in some circumstances refused the medication and surveillance that were prescribed to decrease their vulnerability to falls, malnutrition or health decline. Similarly, Russell (1999) encountered a disjunction between her perception of highly vulnerable older people and in need of protection, and the older people's own perceptions of vulnerability, which focused on the undermining of their autonomy by having programs enforced upon them. At the same time participatory approaches in policy and service delivery are increasingly common (Heslop, 2002; Schröder-Butterfill & Marianti, 2006). Therefore, it is important to identify the older people's perceptions of desirable outcomes in old age.

There are some methods employed to identify the outcome. The first is referring vulnerability or inequality to universal needs. The fulfilment of basic needs is often used as an indicator of wellbeing. Wellbeing refers to positive physical, psychological and social states requiring that basic needs are met, and an individual's ability to take part in society. An unmet

need implies a wellbeing deficit (Allin & Hand, 2014). This definition is similar to the definition of rights. Doyal and Gough (1991) identified health and autonomy as basic universal needs. As basic needs, it derives secondary needs such as adequate nutrition, housing, health care, physical and economic security.

Kreager (2006) argued that in the rural context, vulnerability is related to people's perception of their needs. Older people are frequently assumed to have needs, aspirations and characteristics that are uniform (Harris & Tanner, 2007). Based on this argument, besides basic universal needs, another method to identify the needs of older persons is asking the older persons directly about their most important needs and their priorities in life. When these needs are fulfilled, this situation is considered as a good outcome in their old age. When these needs are not fulfilled, serious harm may result. These unfulfilled needs can be categorized as bad outcomes. In the 2016 Ageing Rural Indonesian Study (ARIS), all of the respondents were asked an open question about their most important needs and the most important things in their life as older people. The word cloud below (Picture 2.17) describes the most common statements about their needs and the most essential things in older people lives.



Picture 2.17: The most common needs and the most important things for older people's lives.

Source: 2016 Ageing in Rural Indonesia Survey

The word cloud (Picture 2.17) indicates that "kesehatan and sehat" were the most commonly stated of the "most important" needs, and the most important thing in older people's lives, at 417 and 381 words respectively. (The two words kesehatan and sehat have essentially the same meaning, relating to health.). Some of the most common states of the expressed need of health include "I want to be healthy always" (ingin sehat terus), "I want to be healthy in order to be able to engage in activities" (ingin sehat agar bisa beraktifitas), "I want to be healthy to be able to work" (ingin diberi kesehatan supaya bisa bekerja). It indicates that the major need of older people is health. Health is part of physical needs which are categorized as the most important needs based on the hierarchy of Maslow's human needs (McLeod, 2007). The older persons also often mentioned that access to health services is a primary need, such that "health security from government is a need" (jaminan kesehatan dari pemerintah sangat diharapkan), "health services for older persons should be a priority" (pelayanan kesehatan untuk lansia perlu diperhatikan) and "free medicine and health check" (diberikan obat dan periksa kesehatan gratis). It reflects that access to quality services such as healthcare in old age remains a major concern for the majority of the ageing population in Indonesia. Another word often mentioned related to health is "pengobatan" (medical treatment), "obat" (medicine) and BPJS (health insurance).

The second most essential set of needs often mentioned is "*anak* (children)", at 218 words. In this context, the word "children" often referred to the need of caring *from* children as often stated such as "I want to live with my children" (*pengen kumpul anak*), "I want to meet with my children" (*pengen ketemu anak*) and "I want my children to take care of me" (*ingin anak bisa merawat*). The qualitative interviews also show similar patterns when I asked older people what makes older people happy. Imah, an elderly woman at the age of 80 living alone for instance, replied "*I am happy if I can live with my children*" indicates the need for caring is among the highest needs of rural older people as many of their children migrated for better employment in the city. As a result, many of the elderly mention that they feel lonely and hope their children come home regularly and send money. They also hope that their children have a better job and better economic conditions. D. R. Phillips (2002) identified the care of older people as one of the most urgent needs arising from population ageing in the Asia-Pacific region.

The need for care indicates the need for safety which is part of social needs as defined in the applied Maslow hierarchy of human needs. Maslow and Lewis (1987) define social needs as the basic human need for love, acceptance and belonging. When social needs are not fulfilled, it can lead to loneliness and social isolation. Loneliness and social isolation might lead to sickness and mortality (Cacioppo, Hawkley, & Berntson, 2003; Steptoe, Shankar, Demakakos, & Wardle, 2013). The higher levels of wellbeing and higher quality of life of older people is often linked to when the social needs of older people are met (Ten Bruggencate, Luijkx, & Sturm, 2018). Therefore, the fulfilment of social needs is essential for older people.

In addition, some older people identified the availability of carers in old age as one of the indicators of "good outcomes" or successful ageing. Ketut, a woman of 63 years who is living with her spouse replied that the availability of carers is one of the indicators of successful ageing when I asked about her concept of a successful older person (Gunung Sari, 07/03/2017). Ketut is not the only respondent who mentioned the availability of a carer as an indicator of successful ageing. Normi, an older woman of 65 who lives with her children also insisted that, besides the enjoyment of life, the availability of a carer also was crucial for successful ageing (Gunung Sari, 07/03/2017). Amin, a male of 64 also said that success for the older person is having children who cared for them in their old age (Giriasih, 20/01/2017, M35EM).

The third common need is "bantuan (assistance)". There are 211 words on the need for assistance. The assistance refers to government assistance where respondents mention that assistance must be equally accessible for the poor elderly and for older people in general" (*kehidupan lansia lebih diperhatikan dan bantuan khusus lansia harus merata*); "the government assistance should be equal as here many people are poor" (*bantuan pemerintah itu seharusnya rata, sini kan golongan miskin*); and "the assistance for the poor should be equal" (*bantuan untuk orang tidak mampu diharapkan merata*). The need for assistance reflects the hope of older persons for the government to increase its role in fulfilling the needs of older people.

Fulfilling the needs of older people is a critical element of the welfare state. O'rand (2018) argues that welfare states are systems of statutory social protection that are more or less developed around market considerations versus citizenship rights. Esping-Andersen has introduced three ideal types of welfare states including the liberal model based on market efficiency found in the United States; the conservative corporatist model based on status allegiances developed in Germany; and the social democratic (or citizenship) model of the Scandinavian countries. Welfare policies in the US emphasize market-based welfare rights through means testing, and minimal levels of social insurance cause a higher level of economic inequality among older populations, including higher rates of poverty. Welfare policies in Germany (conservative corporatist states) allocates more generous non-market-based benefits to decrease risks of falling into poverty. Finally, Sweden (social-democratic States) allocates benefits universally on the basis of citizenship and the government actively participates in the wage-setting process (O'rand, 2018).

The fourth common need mentioned is "uang (money/income)" at 154 words. Many of

the elderly mention that "they need money for daily living costs" (*uang belanja sehari hari*) and "there is a need of financial assistance for the poor and sick elderly but they do not have health insurance" (*perlu bantuan keuangan karena banyak lansia miskin yang sakit namun tidak memiliki jaminan kesehatan*). It indicates the income support is very important as their income might reduce due to increasing age and frailty. When the need for income is not fulfilled, it might harm those old people who are already in poor health and neglected. Therefore, the majority of older people still seek extra income to support their daily needs. Only a small number of them have a pension.

The fifth common need stated is "*bisa* (being able to do an activity)" at 148 words. In the literature, the ability to perform activities is often referred to as functional capacity. It is often measured by Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). Activities of Daily Living (ADLs) refer to a set of common everyday activities, which are required for personal self-care and independent living. The most common measure of functional ability is the Katz Activities of Daily living scale including bathing, dressing, transferring, using the toilet, continence and eating (Katz, 1983; Katz, Downs, Cash, & Grotz, 1970). When an older person is unable to perform these activities, they need help. Activities of Daily Living (ADLs) are often used as significant predictors of admission to a nursing home, paid home care, the use of hospital services, use of physician services and insurance coverage (Hanley, Alecxih, Wiener, & Kennell, 1990). Ability to perform daily activities is among the most vital elements of older people's quality of life which a body of literature has conceptualized as 'active ageing as sustained health and strength where older persons participate in society rather than merely having disease and dependency.

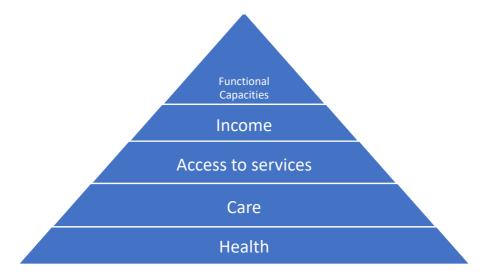


Figure 2.4: Hierarchy of older people's needs according to older people Source: Finding from 2016 Ageing in Rural Indonesia Survey

According to the elderly, the concept of functional capacities is broader than the concept of ADLs and IADLs. According to the older people, functional capacity includes broader roles and activities such as ability to worship God (ingin bisa melaksanakan ibadah), being able to carry out daily activities (tetap bisa melakukan semua aktivitas), being healthy and able to work (seger waras bisa bekerja) and able to give financial assistance to school children (bisa kasih uang saku anak sekolah). These needs might reflect the expected roles of older persons. The ability to worship the gods, for instance, describes a need among older people to increase their religious activities. Performing religious duties is often considered as an appropriate activity for older persons across Indonesia. The word "ibadah" (worship God) and "haji" (a Muslim who has performed the pilgrimage to Mecca) at 59 words and 29 words respectively reflect the importance of religious activity for older people. Another expected role is working and contributing to the family, particularly to their grandchildren. In a body of literature, the role of older people in providing considerable assistance to their children and other family members in a number of forms is often documented. These expected roles impose a need to be able to perform these tasks. Based on the above finding, the pyramid (Figure 2.4) describes the hierarchy of older people's needs.

The second method in identifying bad outcomes is to ask older people directly what outcomes that they try to avoid (Schröder-Butterfill & Marianti, 2006) or what makes them sad. The qualitative interviews found the states that older people try to avoid, or the things that make them sad, include untimely death; poor health; poverty; disability; impairment, no care provider, loneliness and worry about the condition of their children and grandchildren. This finding is very similar to the first approach, i.e. directly asking the elderly about their needs. These findings are the opposite of the first approach. When the older persons are asked about their main need, for instance, they answer "health" while when they asked about their problems, they answer "poor health". It indicates that the need is a manifestation or an outcome of a problem. Identifying a problem is often a strategic step in community development, participatory action research and policy development. To understand the situation of older people in rural areas across culture and regions, this research commences by identifying adverse outcomes experienced by older people.

Turning to the detail of the things that older people seek to avoid or make them sad, the first, poverty, is among the most common bad outcome which worries older people and makes them sad. Poverty is among the most significant issue for older people in the rural areas. The case of ljah, an elderly woman of 73 years living with her grandson only, is a typical example of many poor elderly women who have to work to fulfil their daily needs. Even though ljah suffered from an illness, she had to work to fulfil her needs and her grandson's. To earn money, she rents a rice field. Even though she is unable to cultivate the land by herself as she has

difficulties walking medium or long distances, she forces herself to manage rice cultivation by asking people to work for her. I asked her why she forced herself to work, surprisingly she replied:

I am still able to go to the rice field. I walk to the rice field slowly, my body is not strong enough, therefore I take a rest very often when I go to my rice field. I just want to have a look at my cultivation, I paid other people to work for me. If I cannot work, what should I eat? I feel anxious if I do not go to my rice field (perasaan saya ga karuan kalau ga ke sawah) (Bugoharjo, 5/02/2017, F32LJ).

This case is a description of the poor conditions and lack of support experienced by many older adults in rural Indonesia. During their old age, they have to work, sometimes in a dangerous working environment with very limited income. Their work is often seasonal and that often makes life more difficult. The support system from family to some extent is not sufficient as their children are also poor. This type of poverty is often mentioned in the body of literature as structural poverty.

The second most common bad outcome is poor health and disability. The case of Ninik (75 years old) for instance, might describe the suffering from disease and disability. She lived with her blind and frail husband, Aki (90 years old). They lived with their daughter in law and three grandsons. Aki and his wife have a narrow room at the back of the main house (granny house). The room has a tiny and not well-cleaned kitchen and a bathroom. There are two beds in the rooms with very little space to move around. Ninik cannot walk for a week and only lies down on her bed. Her grandson cares for her and her husband. Ninik's situation is increasingly severe as she gets older due to frailty and sickness. She often has minor falls. The feelings of being frail and often falling are expressed sometimes with sad expressions and sobbing. Her frailty and falling increase her suffering as she always tries to be able to walk and to join religious activities with her friends. She is tormented and embarrassed by her disabilities, mainly when people talk about her sickness and falling, as stated by her:

I want to go to "pengajian" (Islamic recitation) and go everywhere, but I cannot as I fall again and again. After healing, I fall again. I am so sad, I am often bemoaning my fate why I have a long life, but I am frail and sick. I often fall and my husband has the same problem. When I was healthy, I took care of my husband, but now both of us are frail and sick...I am so sad, crying every day, I am so sad when people say to me: "sick again sick again, fall again fall again". I am so happy when I meet people, when I meet with my friends. I feel healthy when I meet them. They often cry seeing my condition. They often visit me, if I miss them, I'm often waiting for them near the road so I can meet them when they return from Islamic recitation. I often cry when I meet them, I want to join them, but I cannot. I want to go to Islamic recitation to prepare for my death and for the provision in the afterlife if there is someone who can carry me (Cacaban, 17/02/2017, F19SI).

This case illustrates that the ability to perform daily activities is a key factor for older people's mental as well as physical wellbeing. Physical functional capacity is one of the

indicators of successful ageing (Rowe & Kahn, 1997). Similarly, MacArthur measured successful ageing into three criteria including freedom from disease and disability, high cognitive and physical functioning, as well as active engagement with life. Engagement with life is usually defined as participation in close personal ties, as well as in productive activities (e.g. volunteering). Moody (2005) insisted that successful ageing is associated with life satisfaction, longevity, freedom from disability, mastery and growth, active engagement with life, and independence.

Having disease and inability to perform daily activities such as walking and attending religious activities reduce the level of older people's wellbeing, as clearly mentioned by Ninik as an adverse outcome. It also illustrates the sensitive feelings of older people, particularly when some people make slighting remarks. Ninik was very upset when people commented about her disease and disability. Ninik was not the only one who felt this way about disease, Jaki, an elderly man of 63 years had similar experiences. Jaki was never married and lived alone during his adulthood. When I asked him the thing that make him sad as an older person, he replied "I often get sick, my blood pressure is often high" (Giriasih, 22/03/2017, M13GKD).



Picture 2.18: Living condition of Jono (photo taken on 5/2/2017)

In addition to disease and disability, mental illness is also one of bad outcome experienced by the elderly. A case study of Jono at the age of 85 years old living with his wife describes the suffering of living with an elderly woman who has a mental problem. He lives at a house terrace, as his wife does not allow him to live inside the house. The terrace is tiny and narrow and has to contain all of his modest belongings as can be seen in picture 2.15.

His daughter, who lives in the same village, sends him food every day and takes his dirty clothes for laundry. He does not want to live with his daughter. When I asked him "why do you do not want to live with your daughter, so she can take care of you properly?". To my surprise, he told me "I cannot bear to leave and I do not want a bad thing to happen to my wife". However, he is distressed about his wife's problems and always prays for her to get better. When I asked about his difficulties as an older person living in a terrace, he stated:

My body is not strong enough...I am sad as my wife has a mental problem. She suffered stress for around seven years. I cannot talk to her (rembukan), she does not allow me to get inside the house, she only cooks for herself, she does not want to give me food, I always pray to God for better health of my wife (Bugoharjo, 5/02/2017, M33LS)

The expression used by Jono is "My body is not strong enough" to show his weakness, and feelings of powerlessness and vulnerability. Psychological distress is a serious problem for older people. The migration of children causes lack of support that in turn may make the older adults feel lonely, depressed and unwanted. In some extreme cases, depression leads to suicide as happen in Gunung Kidul District as stated by the head of Purwosari Community Health Center (*Kepala Puskesmas Kecamatan Purwosari*).

Since I came to work as the head of this community health center, two older persons committed suicide. The suicides might be caused by loneliness as many young people migrated to the city, leaving their parents behind" (Gunung Kidul, 2/10/2015; M88GKP).

The case illustrates the link between suicide, depression and child migration. Child migration most commonly contributes to feelings of loneliness and distress for the parents. Feeling lonely triggers suicide in vulnerable areas like Gunung Kidul District. Gunung Kidul is one of the districts in Indonesia experiencing high suicide rates, reporting around 25 to 30 cases every year (Fahrudin, 2012). Fahrudin (2012) reported based on data from Gunung Kidul Regional Police data, suicide is mostly committed by older people. The suicide problem in Gunung Kidul is unique as the method of suicide is mostly by hanging (*gantung diri*) which is known in the local term as "*pulung gantung*".

The fourth bad outcome is hearing and vision impairment. Health problems particularly eyesight and hearing problems tend to increase with age. This impairment excludes older persons from social participation. The elderly even exclude themselves, as they feel ashamed about their impairment. Aki, a blind man at the age of 90 years old shared his experience:

I do not want to go out, I feel ashamed if I go out.... I am already blind for around two years.... I also have kidney and lung disease. I do not want to go to the doctor, I do not

want to burden my grandchildren to bring me to the doctor, (Cacaban, 18/02/2017, M21SS).

Aki was not the only one who felt this way, a Balinese older man at the age of 70 years who lives only with his spouse prefers to work on his farm as he feels ashamed if someone talks to him and he fails to understand what people say to him.

I have problems with my listening and sight, I cannot listen very well, therefore I am shy if I go out from home, I just go regularly to my plantation every morning and afternoon (Gunung Sari, 8/03/2017, M72BI).

The fifth adverse outcome is feeling lonely and worrying about the condition of children and grandchildren. This is closely related to the migration of children and minority status. Just below 30 percent of older persons in this study have all their children working away from home, and of course the unavailability of children might increase feelings of vulnerability and loneliness. Many of the elderly mention feeling these feelings. Their loneliness is exacerbated by worrying about their children's fortunes in the city, particularly when there is bad weather there or political instability. Some of the older Christian parents are worried about their children's future when rowdy political demonstrations occur in Jakarta. They worry that as minority group members, their distant children might be adversely affected by political issues in Jakarta. During my fieldwork in 2017, a series of demonstrations erupted in Jakarta against a Christian Governor, Basuki Cahya Purnama (Ahok) for alleged blasphemy against Islam. The head of sub-village in Rejoagung stated:

I often talk to older people here, including the elderly who fought for the independence of Indonesia. The majority of people in Indonesia is Muslim, but we ask why there is the FPI (The Islamic Defenders Front). We are a minority; it is a political issue (Ahok case). If you do not like him, so do not elect him. He has already become a defendant in a legal case. This message is not only from the elderly but from many people. The older persons are close to death, but their children and their grandchildren might have a longer life. In conditions like this, many of the elderly worried about the future of their children and grandchildren (Rejoagung, 3/03/2017, M134JT)

Those bad outcomes can often reinforce each other. For instance, some suffer poor health, disability, lack of care and loneliness simultaneously. The case of Tina, for instance, describes this association. Tina suffers from typhus and pain from a tumour. She lives with her two disabled aunts, Nah (90) and Mah (87). Both Mah and Nah have no children and suffer from what is called "old sickness" (*sakit tua*: local terminology for frail older persons). They are bed ridden and highly dependent on Tina to take care of them. As she is poor, she cannot buy medicine for herself and her aunts. They often complain and are angry at her as she cannot provide medical treatment to them. She is constantly sad and as she stated:

My income is not enough to take care of my two aunties. One of my aunties is very fussy and often grumbles to me particularly when she is not medically treated (disuntik). She asked me to call a paramedic every week, but the problem is that I do not have money to pay the paramedic. I need at minimum IDR 25,000 (around \$ 2.50) to pay the paramedic per visit. I cannot afford it for every week. My auntie often said to me when she is not medically treated, "do you want me to die, why I am not medically treated". I am very sad as she does not understand my situation....I am suffering from illness too. I have typhus and tumour. The doctor asks me to do surgery, but I do not have money. The tumour is very painful, and I often cannot sleep because of the illness. I do not have somebody to talk to and share my problems. Sometimes my nephew helps me but not all the time" (Bugoharjo, 5/02/2017, F34LS).

Tina used the local term for medical treatment, which is "*suntik* (injection)". Injection is the most common medical treatment practiced by health workers. Therefore, the term used locally for any medical treatment is "*suntik*". The case of Tina describes the suffering from poverty, lack of care, poor health and loneliness at the same time. As a sick elderly woman, Tina also has to take care of her two aunts and her child, who has a mental problem. She expressed her difficulties and pain from illness by crying. Her poor condition influences her inability to provide medical treatment for her relatives and herself. She has to call a paramedic or midwife to give a medical procedure to her two aunts as they are disabled due to old age. When the midwife or paramedic do visit, Tina has to pay for the visit and medicine. In that case, her health insurance cannot be used. She could use her health insurance if she visited the public health service, but it is nearly impossible to bring her two disabled aunts there. She also mentions that she often feels lonely with no one to talk to about her difficulties. Her children have migrated to the big cities, but they too are poor and rarely send money to her. When she recounted her experiences, she sometimes in tears.

Based on this finding, this research refers inequality to the differences in quality of life (health), care and support from children; the standard of living (economic well-being), and access to social rights (government programs) as the outcome variable. Inequality in health will be discussed in Chapter 4. There are three measure of poor health based on above findings including chronic disease, functional capacities and psychological impairment or mental health. Caring needs will be elaborated in Chapter 5, while the standard of living will be analysed in Chapter 6. Chapter 7 will examine access to social rights.

2.2.2 Explanatory variables: socio-demographic exposure, social engagement and coping capacities of older persons

Figure 2.3 (p. 45) shows three groups of factors that might carry risks for older people, including socio-demographic exposure, social engagement and coping capacities.

2.2.2.1 Socio-demographic exposure

The first group of predictors is socio-demographic exposure. Schröder-Butterfill and Marianti (2006) use the term "exposure" which is defined as states that might "affect the probability of encountering a given threat or outcome" (p. 16-17). I use the term "socio-demographic exposure" in this research as it refers to a subgroup of older persons who are at higher risk of exposure to a bad outcome. Exposure also might be defined as risk factors. These include being female, spouseless, oldest-old, living outside Java village, ethnicity and childless or child migration.

Being female is considered to have more exposure to an adverse outcome in later life as a result of inequalities in early life. The term "spouseless" refers to unmarried, divorced and separated older people. The unmarried state can correlate strongly with insecurity in old age. Being unmarried has a strong association with vulnerability through lack of support, loneliness and poverty in old age (Grundy, 2006; Schröder-Butterfill & Marianti, 2006; Van Eeuwijk, 2006). Van Minh, Ng, Byass, and Wall (2012) found that the quality of life is more likely to be higher among men, people who are in marital relationship and people who live with other family members.

The term "oldest-old" refers to the elderly aged 80 years and over. Chou and Chi (2002) divide older people into three groups, including the young-old cohort (60-69 years old), old-old (age 70-79) and the oldest-old (age 80 and over). This study employs this category in the grouping age cohort of older people in which the oldest-old (age 80+) is more at risk or more vulnerable than other age cohorts. Albert Isaac Hermalin (2010) identified women, the "old-old" and living alone as among the most disadvantaged group of older people.

"Childless" refers to older persons who do not have children (including adopted children and children-in-law) and the older persons whose children had migrated. The older persons whose children had migrated might suffer from a vulnerable situation due to lack of care. A study conducted in Mexico found that the absence of any children at home (in many cases because all children had left to work in the United States) influenced the deterioration of the elderly parents' health, both mental and physical (Antman, 2010).

The term "living outside Java village" refers to older people living in villages outside Java such as Gunung Sari (Balinese), Cacaban (Sundanese) and Muara (Batak Toba). Village is also used as proxy for region and ethnicity. Those who live outside Java also face higher risk factors in later life, as Java is considered more developed and enjoys better health services than other regions. The ethnic group to which older people belong has a significant role in the wellbeing of the elderly (Driedger & Chappell, 2014). "Ethnicity" refers to the variation of groups of people who have shared cultural meanings, memories, and ancestry produced through social interaction (Darity, 2008). J. E. Phillips, Ajrouch, and Hillcoat-Nallétamby (2010) explain

the role of cultural characteristics is significant in differentiating the ageing experience.

2.2.2.2 Coping capacities

Coping capacities are assets and relationships, which allow individuals to protect themselves from an adverse outcome or recover from a crisis (Schröder-Butterfill & Marianti, 2006). Some scholars used the terms that capture a stronger sense of agency, for example, Wisner (2013) used the term 'capabilities' (p. 191), and Moser (1998) used the term of 'resilience' (p.24). Coping capacities constitute 'the ability to avoid or reduce vulnerability [which] depends not only on initial assets, but also the capacity to manage them – to transform them into income, food or other basic necessities' (Moser 1998: 5). Coping capacities can be classified into three broad groups including individual capacities, social networks, and access to social welfare programs. Individual capacities include personal wealth and human capital. Social networks consist of not only family but also friends, neighbours and community institutions such as religious and women's associations (Schröder-Butterfill & Marianti, 2006).

In this study, coping capacities are measured by human capital, socio-economic status, productive assets and access to government programs. The education of older persons is used as a proxy of human capital. Education is often treated as a proxy for income (or for Socio-Economic Status overall). Education is conceived by economists as a human capital investment (Becker, 1962; Mincer, 1962; Schultz, 1975). Higher education is also associated with increased social and cultural capital that in turn, affects the individual's psychological resources, healthy lifestyle, physical functioning, and perceived health and happiness levels (Crystal & Shea, 2003). The older persons who have higher education are considered to have higher coping capacities than the elderly with lower education.

The socio-economic status (SES) of older people is also a significant factor in their wellbeing (Van Minh et al., 2012). The older persons of high socio-economic status are considered as having better coping capacity in the adverse situations of old age. Poor people tend to have weak networks (Schröder-Butterfill & Marianti, 2006). The elderly of a lower social class tends to have poorer health and die at a younger age (Fors, Lennartsson, & Lundberg, 2008; C. o. S. D. o. Health, 2008). Income is often used as a prime indicator for SES (Hermalin, 2010). Socio-economic status in this study is measured by household income in which poverty is often measured by income level.

The possession of assets is also an essential indicator of coping capacities. Assets are a part of economic capital that can be converted directly into money (McGovern & Nazroo, 2015). The older persons who have assets are perceived to have better coping capacities than the people who do not have assets. Moser (1998) introduced the 'asset vulnerability framework' to identify the vulnerability of individuals. This framework is also used to identify those older people who are most in need of material assistance (Lloyd-Sherlock, 2006). Assets include labour power, human capital, productive assets (e.g. housing), household relations and social capital (Moser, 1998). This research defines assets as including land and livestock ownership such as cows and goats. Land ownership is considered very important in the rural agricultural Indonesian context. Ownership of land is often used also as a proxy for social class in rural Indonesia where the people who have land have a higher economic level than the landless.



Picture 2.19: Organic fertiliser in white sacks produced from livestock ready to be brought to the farm (Photo taken on 05/01/2017)

In rural areas, owning land and livestock is a package as each complete each other. In Giriasih for instance, the practice of owning land and livestock is part of local wisdom called "*aji lutung*". The older persons who have land but do not have livestock are expected to incur losses. *Aji lutung* describes the survival strategy in combining farming and having livestock. It is a daily activity where in the morning the elderly farmer brings the "*pupuk kandang*" (organic fertiliser) produced from their livestock to their field (picture 2.19) and brings back edible vegetation for their livestock or wood to be sold at market after they return home (Picture 2.20). Therefore, they feel that they get a loss if they do not have livestock.

Access to social protection programs such as pensions and health insurance is an important indicator of the coping capacities of older people. The older people who have access to social protection programs are considered to possess a higher coping capacity than the elderly without such access. The effectiveness of social protection programs in reducing vulnerability to poverty, lack of instrumental support and health care has been well documented

in the North and South countries (for example Goman, 2004; Gough et al., 2004; Lloyd-Sherlock, 2002; Ogg, 2005). Barrientos (2010) indicated that social protection, particularly social assistance through income transfer had a positive impact on poverty reduction and increases in the human development index. Similarly, Widjaja and Simanjuntak (2010) found that social protection had assisted in decreasing the prevalence of poverty and in improving the social condition of vulnerable groups in Indonesia. Ortiz and Yablonski (2010) found that social protection was a powerful instrument in alleviating poverty and inequality as it reduced poverty in many developed countries by more than 50% up to 2009. The World Bank also reported that social protection particularly unconditional cash transfer was successful in solving problems in the aftermath of natural disasters in Turkey and some low-income countries (World Bank, 2012).



Picture 2.20: An elderly woman carries greenery from her farm to her home (Photo taken on 05/01/2017)

2.2.2.3 Participation or engagement in family care, religious and economic activities

de Leon (2005) cited in (A. Utomo et al., 2019) argued that social engagement was a key factor of successful aging. The elderly who participated in social activities enjoyed positive effects on their health and well-being (Cao & Rammohan, 2016; Glass, De Leon, Marottoli, & Berkman, 1999). In this study "participation" or "social engagement" refers to religious activity attendance, economic activity and the conduct of caring roles in a family. The first is religious activity attendance. Older people in the research area hold Islam, Christian and Hindu as their religion. For Muslims, religious activity attendance refers to their participation in group prayer in the mosque (*sholat berjamaah di masjid*). For Christians, it refers to attending religious activity once a week in the church (*kebaktian*). For Hindus, it refers to performing prayer (*mebakti*) during the day.

The second category is economic activity or participation in the labour force. In rural areas, older people still participate in labour. Census data reported that the labour force participation of older people increased from 41.8 percent in 1990 to 51.2 percent in 2010 (Arifin & Ananta, 2016). Utomo et.al (2019) found that elderly people living in rural areas had higher labour participation rates than older people in urban areas. The third category is providing care to other family members. The term "caring roles" in this study relates to older people who have responsibility for cooking, housekeeping, caring for ill/disabled persons and minding grandchildren. Previous research found that older people continued to provide familial support, for example, by taking the role of primary care givers for left-behind children of migrant parents (Noveria, 2015).

To avoid the multicollinearity in the model, all independent variables were tested to see the strength of association among the independent variables. The test showed that the strongest relationship was between sex of the elderly and marital status (0.38) and between economic activity and age group (-0.33). It indicates that the strength of association among those variables are weak.

2.3 Conclusion

This research is an attempt to understand the life situation of older persons and their environment across socio-demographic groups, how their needs are being met and how to improve the existing system in fulfilling these needs. The data used in this research was mainly drawn from the 2016 Ageing in Rural Indonesian Survey. Six different villages were selected in order to compare the nature and situation of older people. This research employed a mixed-methods approach combining quantitative and qualitative methods. There were three main methods in data collection including surveys, in-depth interview and non-participant observation.

To analyse the life situation of older people, I modified the conceptual framework developed by Schröder-Butterfill and Marianti (2006) on old age vulnerabilities. According to Schröder-Butterfill and Marianti (2006), it is important to identify first the perceptions of older people on the outcomes they seek to pursue and avoid during old age. There were two methods employed to identify bad outcomes. The first is asking the older persons directly about their most important needs and the most important factors affecting their lives. When these needs are not fulfilled, serious harm might result. These unfulfilled needs can be categorized as bad outcomes. Based on this approach, a hierarchy of older people's needs was identified,

starting from needs for health, care and support from children, access to services, adequate income and functional capacities.

The second approach is to ask older people directly about the outcomes that they try to avoid or that distress them. The findings were similar to the first approach, in which the states that older people try to avoid, or the things that distress them included: untimely death; poor health; poverty; disability; impairment; loneliness and worry about the condition of their children and grandchildren. Therefore, this research relates the emergence of inequality to the differences in quality of life (health), caring and support from children; standard of living (economic wellbeing), and access to social rights (government programs) as outcome variables.

Three groups of factors might influence inequality for older people, namely sociodemographic exposure, social engagement and coping capacities. Socio-demographic exposure includes being spouseless, childless, female, "oldest-old", living outside Java, and ethnicity. Coping capacities are measured by human capital, socio-economic status, productive assets and access to government program.

In the next chapter I will examine population ageing in Indonesia and the sociodemographic characteristics of older people in rural areas. It will be divided into two sections including population ageing in Indonesia and socio-demographic characteristics of older people in the study area.

Chapter 3 - Older People in Indonesia Today: Socio-Demographic Profile

3.1 Introduction

Indonesia began its demographic transition towards low fertility and mortality rates and increasing life expectancy and started various family programmes and measures to reduce the incidence of serious illnesses and to improve access to quality health care. These developments influenced a gradual shift in the age structure towards higher age groups. This chapter elaborates the current socio-demographic profile of older people in rural Indonesia. It is broadly divided into two sections. The first section presents measures to identify the ageing population and also compares population ageing in Indonesia with other Asian countries. The second section provides the details of socio-demographic characteristics of respondents. Findings from this chapter provide a context for an analysis of the ageing population in Indonesia.

3.2 Ageing of the Indonesian population

3.2.1 What is an ageing population?

The term ageing refers to the process of growing older. Old age is generally perceived as the last stage within the life cycle. An ageing population is an age structure changing from a youthful population with a large proportion of children or young people to a mature population with increased proportions at middle and older ages (Booth, 2017). An ageing population can be measured in several ways. Booth (2017) pointed out that the first step is to define the age at which old age begins. Old age is often socially constructed and determined by cultural assumptions, or by policy or legislation. There are three different angles in defining ageing including individual ageing, population ageing and qualitative changes in ageing.

Firstly, individual ageing refers to people living longer. Deciding when an individual is aged is difficult as different criteria are used in different circumstances. Some researchers use chronological age and other researchers use social, psychological, or physiological characteristics. Physical ageing is assessed when the person is balding, has grey hair, or must wear bifocals. Other researchers define individuals as aged when they reach 60 or 65 years of age. The age of 65 years old is used as a cut-off to determine older people in most developed countries (Ananta & Arifin, 2009). In this study, older individuals are defined as someone aged of 60 or over, as suggested by Indonesian law number 13/1998 on social welfare for the elderly, and also by the definition used by the United Nations (Atwal & McIntyre, 2013; Indonesia, 1998).

Secondly, population ageing refers to a greater proportion of the elderly in relation to younger people within a population group. Victor (2010, p. 63) defines population ageing as "changes in the internal age structure or a distribution of a population towards the older age groups". The indicator used to measure population ageing is the proportion of people at the age of 60/65 years or more within a given population. Population ageing is driven by demographic transition, which comprises a change from high fertility and high mortality to lower fertility and lower death rates.

Thirdly, the qualitative aspect of ageing relates to different patterns of activity and changing expectations as the population lives longer. The behaviour and elder persons' expectations are constantly evolving, influenced inter alia by social norms. In the past, some might have looked down on older people who paid much attention to their appearance and personal well-being as "putting on airs", but such behaviour has become generally accepted now. Another example of qualitative ageing is older persons in paid employment. In many countries, the demands both for a rise in the retirement age and for older people to remain in paid employment have been increasing in recent decades (Timonen, 2008).

How to identify the ageing population? There are four measures to identify population ageing. The first, maybe the simplest measure, is the proportion of the population classified as "old" (Booth, 2017). Gavrilov and Heuveline (2003) stated that a country could be considered as an ageing population when the proportion of older people aged 65 years and over to the total population exceeds 8 to 10 percent. Arifin and Ananta (2009) classified the stage of ageing population based on the proportion of individuals aged 60 and over. The first stage is the "very young population" when the share of the older persons is below 6 percent. The second stage is a "youthful population" when the proportion of the ageing population is between 6 and 8 percent. The third stage is the "transitional population" when it forms between 8 and 12 percent. The fourth stage is the "old population" when it is above 12 percent. The last stage is the "super-old population" when the percentage is above 20 percent. The second measure is the old age dependency ratio (OADR). It is measured by the ratio of the old-age population to the working age population. The third measure is the old age share of dependency (OASD) which is defined by scaled by a factor of 100. The last measure is a specific proportion or percentile (Booth, 2017).

3.2.2 Population ageing in Indonesia and the ASEAN region

The age structure of the Indonesian population is slowly shifting toward the older age groups due to declining fertility and improving longevity. Figure 3.1 describes the changing age structure from 1971 to 2035. It can be seen from the pyramids that the base of the pyramid becomes narrower from 1971 to 2035. There is a gradual narrowing of the bottom three layers

(depicting ages 0-14 years) which reflects declining fertility. At the same time there is a widening of the top four layers (depicting ages 60 and over) which results from improving life expectancy and increasing the number of older persons. Figure 3.1 depicts the increasing dependency ratio. The Indonesian Statistical Office (BPS) reported that dependency ratios have registered a steady increase every year from around 12 in 2015 to around 15 in 2019. This indicates that the burden on productive people of caring for older people is increasing each year. Without appropriate policy to address the demands for care for the elderly, a serious issue both for older people and adult children may be emerging.

Figure 3.1 illustrates the importance of this latter point. It shows that the number of older people was steadily increasing during the period of 1971 to now and is likely to increase further to 2035. The number of the elderly at the age of 60 and over has increased dramatically from 5.3 million (4.48 percent of Indonesia's total population) in 1971 to 11.3 million (6.29 percent) in 1990 and around 18.1 million (7.6 percent) in 2010. As of 2018, there were 24.49 million people aged 60 and over (9.27 percent), and by 2020, the number will increase to around 29 million people (11.34 percent). The number of older people is projected to rise to 48 million (15.8 percent) by 2035 when the percentage of the population at these older ages will be almost 16 percent, double the present level (BPS, 2013; BPS 2018). The growth rate of older persons was 4.7 percent per year, significantly above the rate of 2.9 percent per year for the general population during the period 1990–2010 (Arifin & Ananta, 2016).

Indonesia can be considered as a transition-to-old population as the proportion of older people was 9.27 percent by 2018. According to Arifin and Ananta (2016), when the proportion of a population is between 8 and 12 percent; it can be considered as a "transitional population". The increasing number of older people is also indicated by an increase in the median age from 17.7 years in 1971 to 27.2 years in 2010 and this is projected to increase further to 33.7 years in 2035. The Ageing Index, which is calculated by the number of older people per 100 children in 1971 to 26 older people in 2010 and is projected to rise to 73 in 2035 (Adioetomo & Mujahid, 2014).

Figure 3.2 compares the increasing ageing population in Indonesia and other countries in 1990, 2019 and 2050. It shows that all countries (201 countries) including Indonesia are growing older. The proportion of older persons (measured by 65 and over) in the entire world is projected to reach nearly 12 percent in 2030, 16 percent in 2050 and it could reach nearly 23 percent by 2100 (DESA, 2019). The proportion of older people is varied across countries, starting from less than 1 percent in Saudi Arabia to 23 percent in Japan in 2010. Japan has the highest proportion of older people in the world.

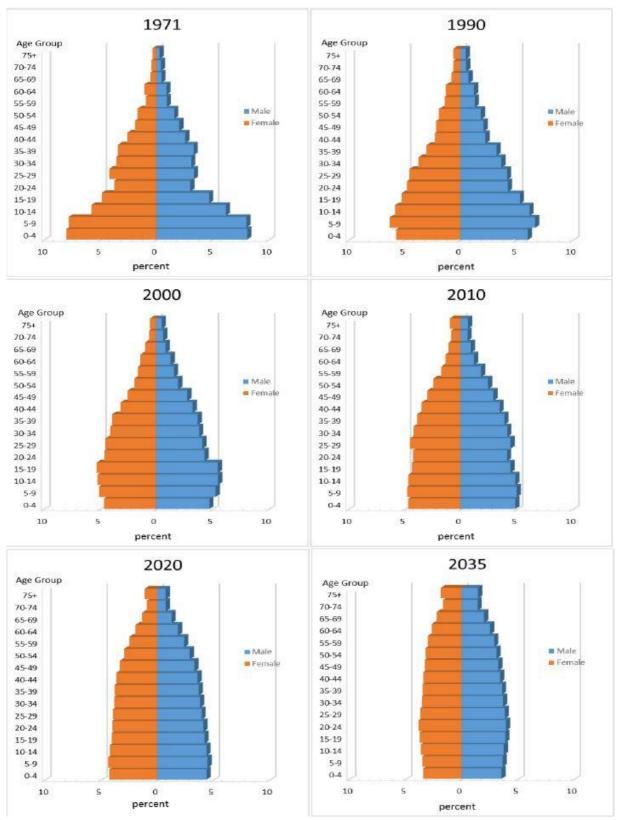


Figure 3.1: The changing age structure in Indonesia from 1971 to 2035

Source: Adioetomo & Mujahid, 2014, p. 5

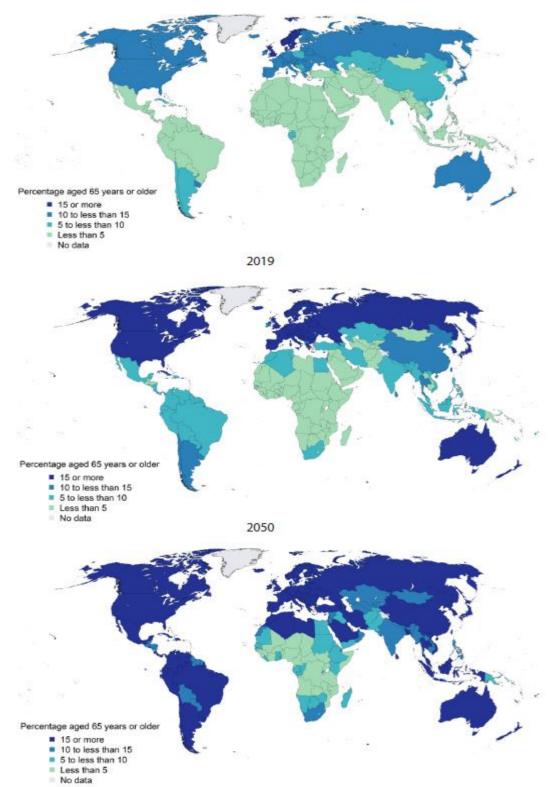


Figure 3.2: Proportion of ageing population around the world in 1990, 2019 and 2050 1990

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, p. 26

Asia in general has experienced only moderate population ageing. In 2010, 7 percent of the population of Asia was aged 65 or older, compared with 17 percent in Europe, 13 percent in North America and 11 percent in Oceania (Booth, 2017). However, the pace of ageing in Asia is accelerating as described in Figure 3.2. When comparing the proportion of older people in Indonesia to other ASEAN countries, the proportion of older people in Indonesia in 2010 is the sixth largest at 7.6 percent, below Malaysia (7.8 percent), Myanmar (7.7 percent), Singapore (14.1 percent), Thailand (12.9) and Vietnam (8.9 percent). Indonesia is predicted to increase to the fifth largest by 2035 and third lowest by 2050 (Adioetomo & Mujahid, 2014). The relatively low proportion of older people in Indonesia is partly caused by the huge number of the Indonesian population. Indonesia has the fourth largest population in the world, after China, India and the United States of America. The Indonesian population in 2010 for instance was just below 240 million, which was significantly higher than other ASEAN countries.

Country	1950	1980	2010	2035	2050		
	percentage of older population in total population						
Brunei	7.6	4.3	6.2	23.2	28.3		
Cambodia	4.5	4.7	7.2	14.3	21.2		
Indonesia	6.2	5.6	7.6	16.2	21.1		
Laos	3.9	5.7	5.6	9.6	15.7		
Malaysia	7.3	5.6	7.8	15.8	23.1		
Myanmar	5.6	6.2	7.7	16.1	22.3		
Philippines	5.5	4.9	5.9	10.4	13.7		
Singapore	3.7	7.2	14.1	29.7	35.5		
Thailand	5.0	5.6	12.9	30.5	37.5		
Viet Nam	7.0	7.8	8.9	21.2	30.6		
ASEAN	6.0	5.9	8.1	17.0	22.4		

Table 3.1: Population ageing in ASEAN countries, 1950-2050

Source: Adioetomo & Mujahid, 2014, p. 54

Table 3.1 shows that most populations are undergoing population ageing in 2010 and all are expected to reach "ageing population" status in 2050 except for the Philippines and Laos. Although the percentage is a significant indicator, the absolute size of the elderly population is more consequential in terms of socioeconomic planning (Adlakha & Rudolph, 1994). Even though the proportion of older people in Indonesia is smaller than other ASEAN countries, the absolute number of older persons is already very large, having reached 24.49 million people which is very close to the total Australian population. Indonesia is well ahead of the other South-east Asian countries in the absolute number of aged people, followed by

Vietnam, Thailand and the Philippines between 1970 and 2030 (Figure 3.2). As at 2010, the number of older persons in Indonesia is three times the total population of Singapore in the same year (Arifin & Ananta, 2016).

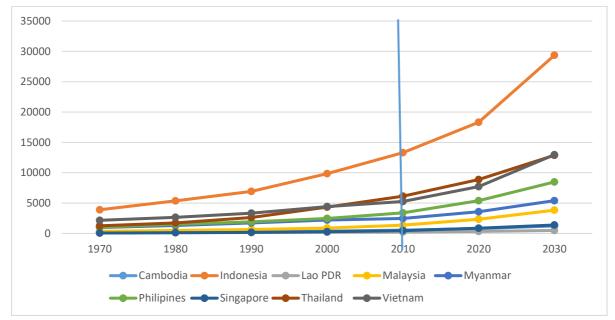


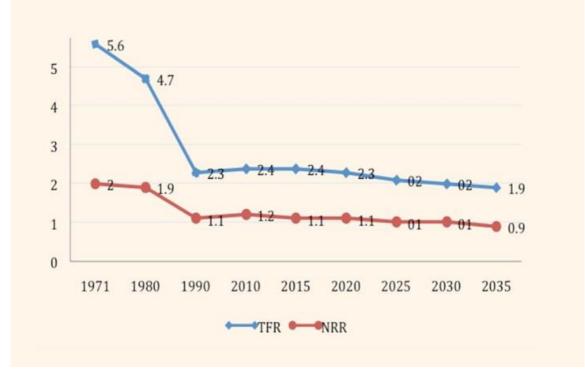
Figure 3.2: The absolute number of older people by country, 1970-2030 (thousands)

Source: United Nations, 2010, p. 384-387

The very large absolute number of older persons might cause difficulties in the provision of goods and services for older citizens, especially bearing in mind that per capita GDP, based on Purchasing Power Parity (PPP), in Indonesia is relatively low at 4,353. This was much lower than Timor-Leste (7,889), Thailand (9,222), Malaysia (14,744) and Singapore (56,708) in 2010 (Jones, 2013). Without appropriate policies, this large number of older people can present very critical social and economic challenges for Indonesia, hampering various development programmes due to increased government expenditure on pensions and old age support.

The ageing population in Indonesia arises from the broad demographic transitions since the 1970s, which have led to significant changes in the Indonesian age structure. During the past forty years, Indonesia has been experiencing rapidly declining fertility rates among large parts of its population. The Total Fertility Rate (TFR) dropped from 5.6 children per woman during the late 1960s to 4.7 at the end of the 1970s and declined further to 3.3 in 1980s and 2.3 in 1990s. This was followed by an increase to 2.4 for the 2000s but a decline is expected during 2010-2035, falling to below replacement level at 1.9 by 2035. The Net Reproduction Rate, that is, the average number of daughters a woman is expected to have during her reproductive life, will decline to 0.9 (Figure 3.3). As a result of declining fertility and

improving life expectancy, Indonesia's age structure is steadily changing toward having more people in older age groups.





Source: Adioetomo & Mujahid, 2014, p. 2

At the beginning of the 1970s, both fertility and mortality were high in Indonesia. The total fertility rate was 5.6 children per woman while life expectancy stood at 46 years. The decline in fertility was caused by the success of Indonesia's family planning program. This achievement was recognized with an United Nations Family Planning award in 1989. Indonesia began family planning programs since the 1950s. In 1969, the institution responsible for population management was *Badan Kependudukan dan Keluarga Berencana Nasional-BKKBN* (National Coordinating Family Planning Board). The role of BKKBN was expanded in its primary function of supporting family planning in 2009. Its name was changed to *Badan Kependudukan dan Keluarga Berencana Nasional-BKKBN* (National Population and Family Planning Board) (Fanany & Fanany, 2018). This office is one of the first Government Institutions providing services to older people through Program *Bina Keluarga Lansia*-BKL/the empowerment of older persons' family (the detail of this program will be elaborated in Chapter 7).

3.2.3 Regional variations in population ageing

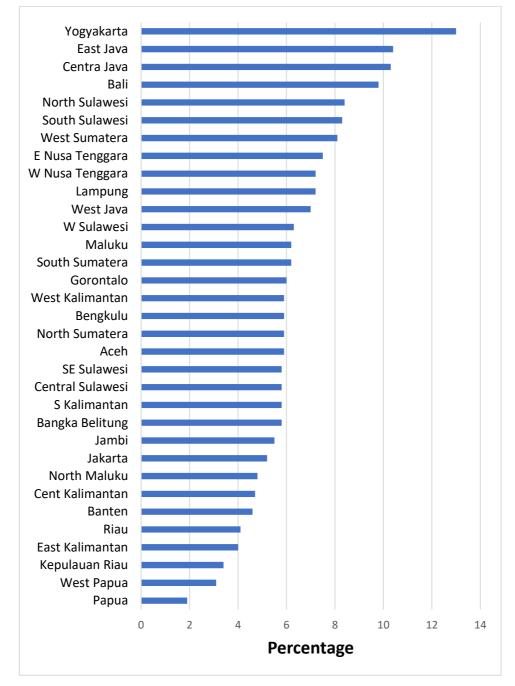


Figure 3.4: Proportion of ageing population in 2010 by province

Source: Adioetomo & Mujahid, 2014

The proportion of older people varies across the regions. Figure 3.4 describes the percentages of older people by province in 2010. The older population is concentrated in the three most densely populated provinces, Yogyakarta, East Java and Central Java, which accounted for 57.0 percent of Indonesia's older persons in 2010. Figure 3.4 shows the wide variations in the extent of population ageing, with the percentage of the older population ranging from the lowest

at 1.9 percent in Papua to 13 percent in Yogyakarta. Yogyakarta is the leading province in terms of having an ageing population. The speed of ageing in Yogyakarta was relatively high with an increase of more than two percentage points over the last two decades. Six provinces (West Sumatra, Central Java, East Java, Bali, North Sulawesi and South Sulawesi) are in the "transitional population" stage, having a proportion of older people between 8 and 12 percent (Arifin & Ananta, 2016).

One of the main reasons for this variation is explained by differentials in fertility and mortality. Provinces with great success in reducing fertility, such as East Java, show the fastest ageing process. Another example is Yogyakarta. Yogyakarta has one of Indonesia's lowest fertility rates as TFR has been below replacement level since the late 1980s. It was 1.6 children per woman or even 1.5 based on the 2007 DHS data (Hull & Hartanto, 2009). Papua province, (just below 2 percent) shows a great contrast to Yogyakarta where fertility rates are significantly higher than that of Yogyakarta at 2.9 children per woman, while the proportion of older people was just below 2 percent (Arifin & Ananta, 2016).

The variation of fertility across provinces might be attributable to the national family planning program. The program was implemented in three phases by the New Order government of President Suharto. The first phase covered Java and Bali in 1971. The second phase started in 1975 covering Sumatra, Kalimantan and Sulawesi. Phase three was started in 1979 covering the rest of Indonesia. This helps to explain why Bali and the Javanese provinces have the highest rates of older people and lower fertility rates. Fertility in the other islands is generally higher and the proportion of older people lower (Adioetomo & Mujahid, 2014).

In terms of district, Gunung Kidul in Yogyakarta Province (one of the research areas) and Pacitan in East Java have almost finished their "old population" stage and may soon enter the stage of "super-old population". Both districts had a population of more than a half million in 2010 and the proportion of older persons in Gunung Kidul was 18.3 percent and of Pacitan 16.1 percent of the total population.

3.3 Socio-demographic characteristics of older Indonesia

Table 3.2 describes the socio-demographic characteristics of the older people who participated in this study. Table 3.2 highlights the feminisation of the elderly. The feminization phenomenon might put older women in a vulnerable position as elderly women tend to have lower education, often live alone and are spouseless. Religious affiliations might explain the marital status of older people. The percentage of divorce among Muslim communities is relatively high compared to other religions, and the prevalence of marriage is also higher.

Characteristics	Ма	Male		Female		Total	
Characteristics	n	%	n	%	n	%	
Sex	817	(44.8)	1,008	(55.2)	1,825	(100)	
Age							
60-69	437	(53.5)	536	(53.2)	973	(53.3)	
70-79	261	(32.0)	286	(28.4)	547	(30.0)	
80+	119	(14.6)	186	(18.5)	305	(16.7)	
Ethnicity							
Javanese	414	(50.7)	497	(49.3)	911	(50.0)	
Sundanese	174	(21.3)	193	(19.2)	367	(20.1)	
Balinese	152	(18.6)	178	(17.7)	330	(18.1)	
Batak Toba	76	(9.3)	139	(13.8)	215	(11.8)	
Other	0	(0.0)	1	(0.1)	1	(0.1)	
Religion							
Islam	418	(51.2)	518	(51.4)	936	(51.3)	
Christian	247	(30.2)	311	(30.9)	558	(30.6)	
Hindu	152	(18.6)	179	(17.8)	331	(18.1)	
Education attainment							
Non or less than primary	226	(27.8)	444	(44.9)	670	(37.2)	
Primary	396	(48.7)	436	(44.1)	832	(46.2)	
Junior Secondary	100	(12.3)	70	(7.1)	170	(9.4)	
Senior Secondary	60	(7.4)	30	(3.0)	90	(5.0)	
Tertiary	31	(3.8)	8	(0.8)	39	(2.2)	
Marital Status							
Never Married	10	(1.2)	23	(2.3)	33	(1.8)	
Married	692	(84.9)	480	(48.4)	1,172	(64.9)	
Widow/er	86	(10.6)	422	(42.5)	508	(28.1)	
Divorce	27	(3.3)	67	(6.8)	94	(5.2)	
Children		()	-	()	-	(-)	
Biological	3,255	(94.6)	3,178	(94.6)	6,433	(94.6)	
Stepchildren	158	(4.6)	158	(4.7)	316	(4.7)	
Adopted Children	29	(0.8)	22	(1.0)	51	(0.8)	
Number of living Children							
0	12	(1.5)	32	(3.3)	44	(2.5)	
1-2	289	(36.2)	312	(32.2)	601	(34.0)	
3-4	317	(39.7)	347	(35.9)	664	(37.6)	
5+	180	(22.6)	277	(28.6)	457	(25.9)	
Location of Children	·	. ,		、 <i>'</i>		. ,	
Co-reside	318	(38.9)	411	(40.8)	729	(40.0)	
The Same Village	345	(42.2)	451	(44.7)	796	(43.6)	
The Same District	217	(26.6)	258	(25.6)	475	(26.0)	
City	165	(20.2)		(19.0)	356	(19.5)	

Table 3.2: Socio-demographic characteristics of older persons in this study

Characteristics	Male		Female		Total	
Characteristics	n	%	n	%	n	%
The Same Province	262	(32.1)	313	(31.1)	575	(31.5)
City in another province	285	(34.9)	362	(35.9)	647	(35.5)
Rural Areas in Other Provinces	76	(9.3)	88	(8.7)	164	(9.0)
Overseas	28	(3.4)	22	(2.2)	50	(2.7)
Living Arrangement						
Living alone	52	(6.3)	187	(18.4)	239	(13.0)
With spouse only	297	(36.0)	227	(22.4)	524	(28.5)
With spouse and others	117	(14.0)	67	(6.6)	184	(10.0)
With adult children	114	(14.0)	285	(28.1)	399	(21.7)
With spouse, adult children and/or others With others (not spouse and	177	(21.5)	111	(10.9)	288	(15.7)
adult children)	67	(8.1)	137	(13.5)	204	(11.1)

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

The socio-demographic characteristics of older people in the research area are very similar to the national level as described in the sub section below.

3.3.1 Gender distribution

Table 3.2 shows the total number of elderly respondents is 1,825 persons. The number of female elderly is higher at 1,008 (55.2 percent) than male elderly at 817 persons (44.8 percent). Similarly, at the national level, the 2010 census reported that 54 percent of older people were women (Adioetomo & Mujahid, 2014). The higher number of women than men might reflect higher male mortality after reaching age 60. Thus, older populations are typically disproportionately female. This large number of women among older persons is sometimes referred to as the "feminization of the ageing". Emphasizing the feminization of the elderly might lead to policy focus on the vulnerabilities of women when considering the gender specific needs of older persons (Knodel & Ofstedal, 2003). Therefore, it is important to note that the male elderly still make up a substantial share of the elderly cohort in the project sites. For instance, over 14 percent of elderly at 80 and over are men compared to 18.5 percent of women.

The gender distribution among the villages is varied as can be seen in Figure 3.6. In general, the percentage of elderly women is higher than elderly men except in Rejoagung where the percentage of elderly men is slightly higher. The significant gender difference occurs in Muara where the percentage of female elderly is almost twice the percentage of the men (64.7 percent VS 35.4 percent). The other villages reveal similar patterns where women outnumber men.

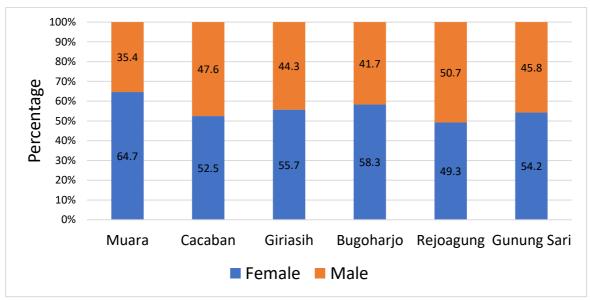


Figure 3.5: The percentage of older persons by village and sex

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

3.3.2 Age distribution

Table 3.2 shows that the majority of the elderly, both male and female are those categorized as "young elderly" (60 - 69 years old), constituting just over 53 percent of total respondents, followed by those between 70 and 79 at 30 percent, and those above age 80 at 16.7 percent. The mean age of older persons also varies across localities. The mean age of the male and female elderly is similar in Rejoagung and Giriasih, while in Muara and Gunungsari the mean age of the men is higher than the women. In contrast, the mean age of women is higher in Cacaban and Bugoharjo (Figure 3.6).

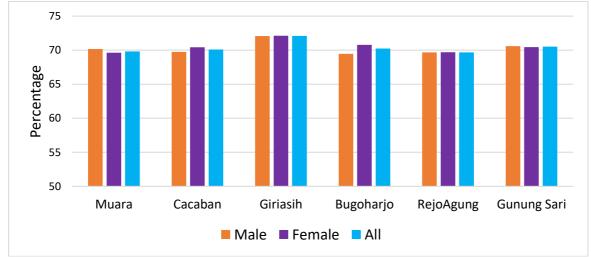


Figure 3.6: The mean age of older persons by sex and village

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

3.3.3 Religious affiliation

Table 3.2 (p. 74-75) indicates that just over 50 percent of the respondents confess Islam as their religion. Christianity as the second-largest religion accounts for 30 percent of the sample, the remainder being Hindu. Muslims are living in the three villages of Giriasih, Bugoarjo and Cacaban. The type of religious practices among three villages is however different. One hundred percent of Muslims in Bugoarjo are affiliated to Nahdatul Ulama (NU), the largest Muslim community-based organization in Indonesia, while the majority in Giriasih are affiliated to Muhammadiyah, the second largest Muslim association. Christians also varied, though the majority were Protestant. They are also affiliated to different churches, as those in Rejoagung are affiliated with GKJW (*Gereja Kristen Jawa* Wetan– Javanese Christian Church) while the Christians in Muara affiliate with HKBP (*Huria Kristen Batak Protestan* – Batak District Protestants). The Christians in Rejoagung are unique as almost 100 percent of the villagers are Christian while the surrounding villages are Muslim. Rejoagung with Christian villagers is unique in Jember District which is well known as a Muslim area with strong Islamic devotion and practices.

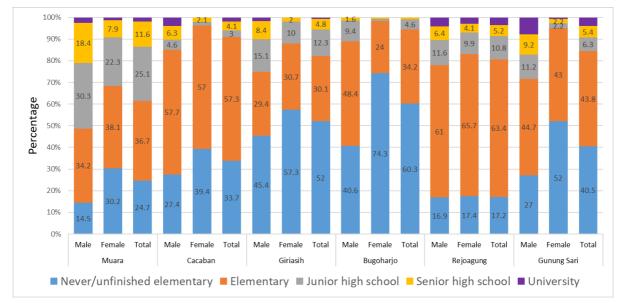
3.3.4 Ethnicity

Table 3.2 (p. 74-75) illustrates that there are four ethnic groups in our sample, including Javanese, Sundanese, Batak Toba and Balinese. Only a small proportion (0.1 percent) is categorized as "others". The majority of respondents at around 50 percent are Javanese, bearing in mind that Javanese constituted about 41.7 percent of Indonesians in 2010. As the largest ethnic group, the majority of older persons in Indonesia are of course Javanese, which make up 48.6 percent of the total elderly cohort in Indonesia (Ananta, Arifin, & Bakhtiar, 2005). Sundanese is the second largest ethnic group in the sample accounting for just over 20 percent. Similarly, at the national level, Sundanese is the second largest ethnic group in Indonesia, at 15.4 percent of Indonesians in 2010. As the second-largest ethnic group, the Sundanese comprise the second largest proportion (16.9 percent) of population of older people (Ananta, Arifin, & Bakhtiar, 2005). Table 3.2 (p. 74-75) also shows that Balinese and Batak Toba have percentages in the sample of 18 percent and just below 12 percent respectively.

3.3.5 Educational attainment

The level of education has significant implications for the well-being of the elderly. It is closely associated with the ability to read and write fluently and thus affects considerably the ability of older persons to access important information that impacts many aspects of their lives. Table 3.2 (p. 74-75) shows that more than 80 percent of study respondents completed primary school and none or less than primary school. Only a small proportion continued on to secondary or

higher levels, namely 7 percent who attended senior secondary or higher. Overall, substantial differences are apparent according to sex. Men have had more formal education than women, with fewer men having no schooling and more men having progressed onto secondary or higher levels. The different educational attainment between male and female might reflect the traditional culture of the time where the parents mostly prioritized boys' rather than girls' access to education.





Source: Calculated from 2016 Ageing in Rural Indonesia Survey

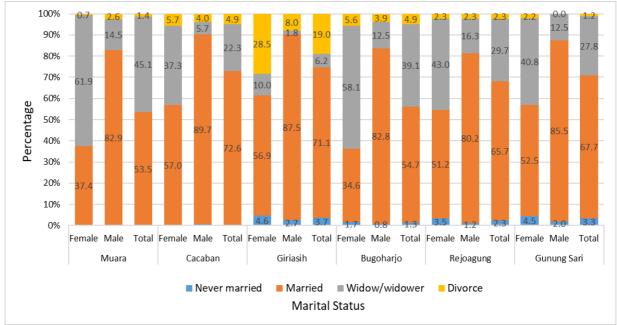
Figure 3.7 describes substantial differences according to gender and villages. The most educated were in Rejoagung village where older persons were substantially more likely than other villages to have gone beyond the basic primary level and especially to have received an education beyond the secondary level. The percentage of older persons who either never attended school or failed to finish elementary school were the lowest among the villages at 17.2 percent, and on the other hand 3.5 percent finished tertiary education. The highest number of elderly who never attended elementary school or attended but failed to finish was in Bugoharjo at 60.3 percent, and no older persons there completed tertiary education. This was followed by Giriasih where 52 percent of the elderly never attended elementary school or left before completing study there.

Gender differences are also pronounced in most villages. Figure 3.7 highlights gender differences among villages, where men have had more formal education than women in all villages. The sole exception to this was Rejoagung where the educational attainment of men and women was similar. In general, the female elderly in Bugoarjo and Giriasih were not well

educated. Almost two thirds of women sampled in Bugoharjo and more than half of female elderly in Bugoharjo never attended school or attended but did not finish elementary school.

3.3.6 Marital status

Marital status has important implications for wellbeing, and the presence of a partner can guarantee social, emotional, personal care and material support during illness or frailty. Table 3.2 (p. 74-75) shows less than 2 percent of older persons sampled had never married and over 60 percent were still married. Only a small number is separated or divorced. Gender differences are pronounced regarding marital status. The percentage of women who never married is higher at 2.3 percent than men at 1.2 percent. More than 80 percent of elderly men are currently married compared to less than half of the women, meaning that the widows (42.5 percent) outnumber widowers (10.6 percent). This gender difference is a reflection of cultural factors in which higher remarriage rates occur among men than women in cases of marital dissolution. It is common for widowers to remarry, while widows are more likely to remain unmarried after the death of their spouse.

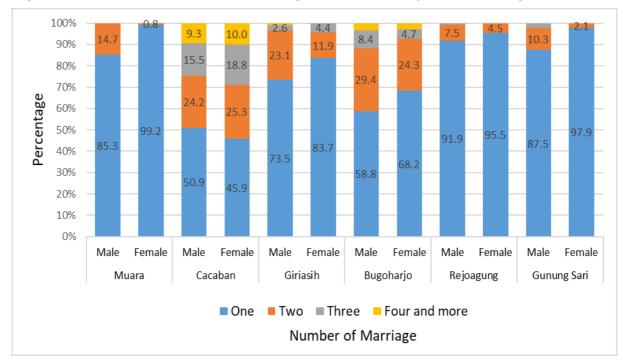


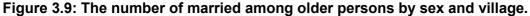


Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Figure 3.8 describes substantial differences among villages in marital matters. The percentage of divorces among Muslim communities is relatively high compared to other religions. The percentage of female older persons who are divorced, for instance, is higher at 28 percent in Giriasih, just over 5 percent in Bugoharjo and Cacaban (muslim communities) compared to just over 2 percent in Gunungsari (Hindu) and Rejoagung and below 1 percent in

Muara (Christian). Divorce permissiveness among Muslim communities might be the explanation for the high number of divorces among Muslim communities.





Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Moreover, the number of marriages is also high among Muslim communities. Figure 3.9 highlights substantial differences in numbers of marriages. The number of thrice-married persons is much higher among Muslim communities. The number of women who get married three times is higher in Cacaban (18.8 percent) and Bugoarjo (just below 5 percent) for instance, than in Gunungsari (2.2 percent). Interestingly, we found no older persons who were married three or more times in Christian communities, except in Rejoagung where this occurred among 0.6 percent of older persons. The Muslim custom of men being allowed four wives might explain this pattern.

3.3.7 Number of living children

Step- and adopted children as well as biological children are included in the counts of living children in our calculations. Adult living children are important providers of material support as well as other forms of support to their older-age parents. Table 3.2 (p. 74-75) describes the number of living children according to sex of the elderly. Only a few older persons are childless (4.2 percent), although this is more common among women than men (5.4 percent vs 2.7 percent). The elderly who have no children might rely on others for assistance or caring. The majority of older persons (35.6 percent) have 3-4 living children, followed by those with 1-2

children (31 percent) while 29.3 percent had more than 5. On the average, elderly women have more living children than elderly men.

Table 3.2 (p. 74-75) also describes the number of biological, step and adopted children of older persons. There is no significant difference between the number of male and female children. Just below 95 percent of children (6,433 children) are biological children. It was followed by step-children at 4.7 percent (316 children) and adopted children at 0.8 percent (51 children).

3.3.8 Location of children

Figure 3.10 describes the migration status of older persons' children by village, categorized into three including having both migrant and non-migrant children, migrant children only and non-migrant children only. The non-migrant children are those who co-reside or live in the same village with the elderly, while migrant children are the children who dwell in the same district, the same province, a big city in the same province, a big city in other provinces, the rural areas in other provinces and overseas.

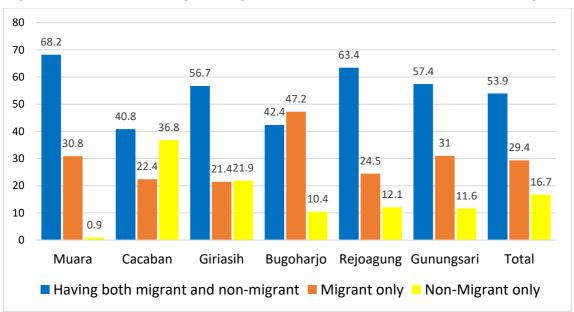


Figure 3.10: The percentage of migration status of older persons' children by village.

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

The majority of older persons (53.9 percent) have both migrant and non-migrant children. The second group is those who have migrant children only, at just below 30 percent. The unavailability of children living near the older persons might increase their vulnerability, as children are the main source of support for older persons in the traditional culture of Indonesia. A small number of older persons, at just below 17 percent have non-migrant children. Those non-migrant children might co-reside with their parents or live in the same village.

These patterns are similar at village levels except for Bugoharjo and Cacaban. In Bugoharjo, the majority of older persons at just over 47 percent have migrant children only, followed by groups which have both migrant and non-migrant children. In Cacaban, the lowest percentage is the elderly who have migrant children at only around 21 percent. This indicates that the prevalence of youth migration in Cacaban is not as high as other villages. This phenomenon might be explained by the local custom in Cacaban where children are expected to stay near their parents or family. Many of them are relatives and have family relations in their environment.

Table 3.2 (p. 74-75) describes the detailed location of children of older persons. The majority of the elderly (43.6 percent) live in the same village as their children. The second group, of around 40 percent of older persons co-reside with their children. This was followed by those who have children living in a big city in other provinces at 35.5 percent, children who are living in the same province at 31.5 percent, children who are living in the same district at 26 percent, and the children who migrate to big city in the same province at 19.5 percent. The least common group is the older persons who have children working overseas at 2.7 percent.

3.3.9 Living arrangements

The living arrangements of older people determine to a large extent what support they receive and from whom (Keasberry, 2001). The living arrangement concept refers to the familial system of support and care of older adults. In the absence of formal services for the elderly, older persons have to rely on persons living in their close proximity. Thus, the living arrangement becomes an essential component of the overall wellbeing of the elderly and indicates the level of actual support available to them.

The living arrangements of older people are conceptualised into six categories, including living with adult children and/or other; living with spouse only; living with spouse and others; living with spouse, adult children and other; living with others, and living alone. Table 3.2 (p. 74-75) describes the distribution these living arrangements. The majority of older persons (28.5 percent) are living with spouse only. This indicates the high levels of youth migration where parents are left behind in the villages. The figure for husbands living with only their wives (36 percent) exceeds the number of wives living with only their husbands (22.4 percent). The number of elderly who live totally alone is very high at 13 percent compared to previous research (such as Arifin, 2006; Frankenberg et al., 2002; Witoelar, 2012) where living alone is the lowest percentage. Women are three times more likely to live alone compared to men. This difference might reflect the fact that men tend to remarry more often than women do. It is relevant in this context that just over 85 percent of men in the sample are married compared to just over 48 percent of women. According to them (both elderly men and women),

they prefer to live alone rather than follow their children in the major cities as they cannot be "active elder persons" in the towns.

3.4 Conclusion

The population of Indonesia can be categorized as transitional as the current percentage of older people is 9.27 percent but this figure is predicted to increase slowly in the future. Although the proportion of older people in Indonesia is relatively low compared to other ASEAN countries, as noted earlier the absolute number of older persons is much higher. The absolute number of older people has reached 24.49 million people which is very close to the current Australian population. The very large absolute number of older persons might cause difficulties in providing goods and services for this cohort while per capita GDP based on Purchasing Power Parity (PPP) in Indonesia is relatively low compared to other ASEAN countries. This demographic transition poses severe challenges for policy makers on how to maintain older people's quality of life.

The proportion of older people varies across provinces. The only province that has reached the "ageing population" category is Yogyakarta. Two districts are close to reaching "super-old" population status: Gunung Kidul (Yogyakarta) and Pacitan (East Java). The provincial disparities in the proportion of the aged population arises from the family planning program. The provinces that decades ago received the program in its earlier stages have experienced lower fertility and a higher ageing population. It was thus not unexpected that the regions receiving the programs in the latter stages of their development have experienced higher fertility and lower ageing population.

This chapter also shows that the variations in the demographic and socioeconomic profile of older persons in the research areas might reflect national characteristics due to similarities in the socio-demographic profiles. The feminisation of the elderly for instance is shown in the present research area, at the national level and also in other ASEAN countries. The feminization of the elderly cohort carries with it a high vulnerablity risk as elderly women tend to have lower education levels, they often live alone and are widows. Religious affiliations might help to explain differences in the marital status of the older cohort. The percentage of divorces among Muslim communities is relatively higher compared to other religions, and the number of marriages is also higher among those communities.

The variations in sociodemographic characteristics of older people can influence their quality of life. The next chapter elaborates the variations in health status of older persons as an indicator of quality of life across socio-demographic groups in rural Indonesia. The variations in health status are an indication of inequality experienced by older people as they age.

Chapter 4 - Health Inequalities among the Rural Indonesian Elderly: Why Gender, Ethnicity, Regions and Social Class Matter

4.1 Introduction

Health inequality can be defined as "observable differences between subgroups within a population" WHO (2013, p. 6). The term "health inequalities" has a generally been understood to refer to variances in health between people with different positions in a socioeconomic hierarchy, by gender and by ethnic group or national origin (Braveman, 2006). The focus of the present chapter is the health inequalities among the elderly in rural Indonesia.

A high proportion of the elderly lives in rural areas while younger people mostly migrate to seek better occupation in industrial areas (Kreager, 2006). Youth migration exacerbates age-structure imbalances in rural regions by removing young adults while the older population is increasing. The changing age structure affects the population's education, employment, health and welfare (Niehof, 1995). The migration can increase the vulnerability of older persons due to lack of carer and daily support from their offspring. Schröder-Butterfill (2005) defined vulnerability as "the heightened risk of being without adequate and acceptable care and practical help" (p. 140). Based on this definition, older persons with poor health and experiencing difficulties in performing daily activities can be categorized as vulnerable.

Past studies (for instance Abikusno, 2007; Sigit, 1988) have indicated that health status among older persons in rural areas is lower than in urban areas. Abikusno, Haque, and Giridar (2007) maintained that the prevalence of infectious disease among older persons living in rural areas was slightly higher than urban areas. Other studies (for instance Kreager and Schröder-Butterfill, 2006; Subiyono, 1999; Trisnawati, 2013; Van Eeuwijk, 2006) also elaborated the vulnerable situation of older people due to exposure to adverse socio-demographic factors. Kreager and Schröder-Butterfill (2006) for instance identified those older persons with poor health, those who are childless; spouseless and having a disability as more vulnerable in rural Java. However, the specific investigation of current health status and vulnerabilities of older people across regions, cultures and socio-demographic factors in rural Indonesia needs further research.

Comparative analysis across different cultural settings and ethnicity as the primary institutions such as the kinship system and social structures is essential. Kinship systems and social structures prevailing in rural areas are varied. Indeed, family and household organization differ from one ethnic group to another. This chapter aims to examine the current health status of older persons across regions in rural Indonesia, how and why it varies across region, ethnicity, social class and socio-demographic groups of the ageing population in the different socio-cultural background.

In the analysis, I use ethnographic content analysis of the activities of older persons' pictures to understand the patterns and trends of words used, space and direction of images (Grbich, 2007; Liamputtong, 2009; Neuman, 2011) in gendering the roles of men and women. Photographs are often used as a starting point to explore the everyday life of vulnerable groups (Flick, 2009). The photos were purposely sampled as the discourse portrayed in them link to the dominant cultural values in contemporary rural Indonesia.

4.2 The distribution of health inequalities by type of health indicators

The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Callahan, 1973; Mattson, 1982, p. 111). The definition shows that health has several dimensions including physical, emotional and social. The multifaceted health dimensions represent the complex structure of health. The first step of the analysis is to explore the prevalence of reported poor health. There are three measures employed to identify health status of the elderly including disease, disability and psychological impairment. These three dimensions of health are conceptualised as three distinct dependent variables in the analysis. Three measures of health are employed with the aim of checking the consistency and robustness of the model. It is also aimed to capture the different aspects of healthy ageing.

4.2.1 Disease

Medical perspective defines health as the absence of illness (Hermalin, 2010). Illness in this chapter refers to chronic diseases, which are diseases that tend to be long-lasting and have persistent effects. Chronic health conditions are one of the most common measures of the health of the older population (Quadagno, 2008). The survey employs two approaches to identify chronic disease suffered by the elderly, including self-reports and objective measures. Self-reports were conducted by asking respondents whether they currently have specific medical conditions such as hypertension and heart disease. Objective measurements were conducted through measuring blood pressure and body mass index (BMI). The diagnostic was conducted only for the data collection in 2016 excluding Giriasih). Table 4.1 describes the chronic diseases reported by the older persons and the objective hypertension measure by type of questionnaire (As shown below, two questionnaires were used, the "Elderly Questionnaire".)

Disease	All (N: 1,805)			Elderly Questionnaire (N: 1645)			Proxy Questionnaire (N: 160)		
Self-Report	Female	Male	All	Female	Male	All	Female	Male	All
High Blood Pressure	27.2	15.0	23.0	26.8	14.3	21.0	30.1	25.5	28.8
Heart disease	3.6	3.0	3.3	3.5	3.0	3.3	4.4	2.1	3.8
Stroke	2.9	3.0	2.9	1.7	1.8	1.8	12.4	21.3	15.0
Diabetes	3.6	3.3	3.5	3.8	3.1	3.5	2.7	6.4	3.8
Cancer	0.8	0.4	0.6	0.9	0.4	0.7	0.0	0.0	0.0
Liver/kidney	16.6	12.6	14.7	17.4	12.8	15.3	10.6	6.4	9.4
Asthma	3.9	7.6	5.6	3.4	7.6	5.4	8.0	8.5	8.1
Cataracts	4.8	5.4	5.1	4.9	5.0	0.1	4.4	12.8	1.3
Arthritis	17.4	13.4	15.6	17.4	13.2	15.4	17.7	17.0	17.5
Osteoporosis	4.3	2.8	3.7	4.2	2.8	3.5	5.3	4.3	5.0
Gout	17.1	14.1	15.7	18.4	14.7	16.7	7.1	4.3	6.3
Dementia	0.7	0.4	0.6	0.3	0.0	0.2	3.5	6.4	4.4
Others (e.g. prostate, herpes, gastric, cough)	8.8	13.1	10.7	8.9	12.3	10.5	8.0	25.5	13.1
Objective Measure		N: 1465		N: 1,337			N: 129		
High Blood Pressure	53.2	42.3	48.2	52.9	42.5	48.0	55.4	39.1	49.6

Table 4.1: Percentage of older persons diagnosed with chronic disease by type of questionnaire.

Bold: P Value < .05

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Table 4.1 compares patterns of diseases reported by older persons (elderly questionnaire/questionnaire B) and the care provider (proxy questionnaire/questionnaire C). As can be seen in Table 4.1, the presence and prevalence of chronic illness among respondents are quite low. The apparent low incidence might be caused by lack of understanding and knowledge by respondents of their own health conditions, as well as poor access to health facilities. It can also be assumed that due to financial limitations, the rural elderly cannot afford to attend community health centers, so that their illness remains undetected. Some respondents stated that they have "*sakit tua*", a disease of being old. It indicates that they do not know the disease, and they accepted that their condition is a common one. Therefore, they might fail to check their disease with health professionals for other reasons beside the financial.

In general, there are four main diseases reported by the elderly including hypertension (23 percent), gout (15.7 percent) arthritis (15.6 percent) and liver/kidney disease (14.7 percent). Table 4.1 also shows that generally the elderly who were interviewed indirectly using the proxy questionnaire reported higher percentages of disease, particularly significantly higher blood pressure, stroke, cataracts and dementias than older people who responded to the question by themselves. It can be explained that the proxy questionnaire was designed to

collect information from older people who are ill at interview time or physically unable to respond to the questions.

Elderly women have significantly higher prevalence rates for most chronic illness than men except for asthma and a few other conditions. The percentage of older men with asthma is significantly higher at 7.6 percent than elderly women at 3.4 percent (questionnaire B). The higher percentage of asthma might be caused by the pattern of smoking among older men. Table 4.1 also describes the true high incidence of blood pressure indicating that objective hypertension is much higher (at just below 50 percent) compared to the self-rated measure at around 23 percent. This is evidence that self-reported conditions might not capture the real levels of health condition among the elderly. This chapter uses the objective measure of hypertension as a proxy for the physical health condition of the sample.

4.2.2 Disability

There are two commonly used measures to define disability in old age. The first is referring disability to the degree of difficulty in executing the Activities of Daily Living (ADLs). The term "activities of daily living" refers to a set of those common everyday activities which are required for personal self-care and independent living. The most commonly used measure of functional ability is the Katz Activities: the daily living scale activities including bathing, dressing, transferring, using the toilet, continence and eating (Katz et al., 1963; Katz, 1983). When an older person is unable to perform these activities, they need help. Activities of daily living are often used as significant predictors of admission to nursing homes, paid home care, the use of hospital services, the use of physician services and insurance coverage (Wiener, Hanley, Clark, & Van Nostrand, 1990).

Besides ADLs, Instrumental Activities of Daily Livings (IADLs) is also often used to measure the functioning of older people. Instrumental Activities of Daily Livings cover a wide range of activities which is more complex than ADLs, including handling personal finances, meal preparation, shopping, travelling, doing housework, using the telephone and taking medication (Wiener et al., 1990). This study only employs ADLs measures to identify the disability and need for care among older people because the ability to perform IADLs are usually lost before ADLs. Another reason to employ ADLs only without combining with IADLs is that earlier studies such as Garrad and Bennett (1971), Fillenbaum and Smyer (1981), Spector, Katz, Murphy, and Fulton (1987) and Kempen and Suurmeijer (1990) as cited in R. J. Johnson and Wolinsky (1993) suggested the ADLs and IADLs should be modelled separately because separation is better than the combined version.

Another reason is that the outcome of employing ADLs measure only might be comparable with the 2010 Population Census. The census identify person with disability by asking all respondents if they had difficulties in (1) seeing even if wearing glasses, (2) hearing even if using a hearing aid; (3) walking or climbing stairs, (4) remembering, concentrating or communicating with others due to a physical or mental condition, and (5) self-care such as bathing and dressing. The census collects the data on the ability to do self-care, which is often described in the literature as abilities in performing the activities of daily livings (ADLs). This chapter identified ADLs through seven questions denoting whether the older person is able to perform a particular task with ease, or whether he/she is unable to, or finds it difficult to perform a specific task. These tasks include putting on clothes without help, defecating without assistance, showering/bathing, getting up from the bed, walking across the room, standing up after sitting down, eating and drinking. Table 4.2 describes the distribution of older persons with activity daily living difficulties by type of questionnaire.

Table 4.2: The percentage of older persons with difficulty in activities of daily livings (ADLs) by type of questionnaire (N: 1,805).

ADLs Difficulties	All (N:1,805)		Elderly	Elderly (N: 1,645)			Proxy (N: 160)		
	Female	Male	All	Female	Male	All	Female	Male	All
Putting on clothes without help	6.8	5.2	6.1	3.8	3.1	3.5	31.0	38.3	33.1
Defecating without assistance	6.2	4.7	5.5	3.2	2.8	3.0	30.1	36.2	31.9
Showering/bathing	6.4	4.7	5.7	3.0	2.8	2.9	33.6	36.2	34.4
Getting up from the bed	9.3	5.7	7.7	5.8	3.7	4.8	36.3	38.3	36.9
Walking across the room	9.3	5.8	7.7	5.5	3.9	4.7	38.9	36.2	38.1
Standing up after sitting down	12.1	7.4	10.0	8.1	5.2	6.8	43.4	42.6	43.1
Eating and drinking	11.2	7.4	9.5	7.8	5.4	6.7	37.2	40.4	38.1

Bold: P Value < .05

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Table 4.2 also shows that older people who cannot respond to the questions themselves have a significant higher level of difficulty in all basic activities. More than half of older people are reported having one or more difficulties in activity daily living. The responses are scored zero (score of 0) if the older person is able to perform the activity with ease, and a score of one (score of 1) if the older person is unable or finds it difficult to perform a certain task. The score index ranges from 0 to 7 with 0 indicating that the older persons can perform all seven tasks easily and seven indicating that the respondent is either unable or find it difficult to do all of 7 activities. Figure 4.1 describes the distribution of the difficulty of activity daily livings by type of questionnaire.

Figure 4.1 shows that a large majority of the older people did not need help with the personal activities of daily life because they could still perform them without difficulty. Only a small percentage of respondents had one or more difficulties in activity daily living. Therefore, the older people who had one or more difficulties were collapsed as one group and defined as

a dependent variable. Just below 17 percent of older persons reported difficulties in performing one or more ADLs. This indicates that around 17 percent of older persons were disabled and appeared to need help with these basic self-care tasks.

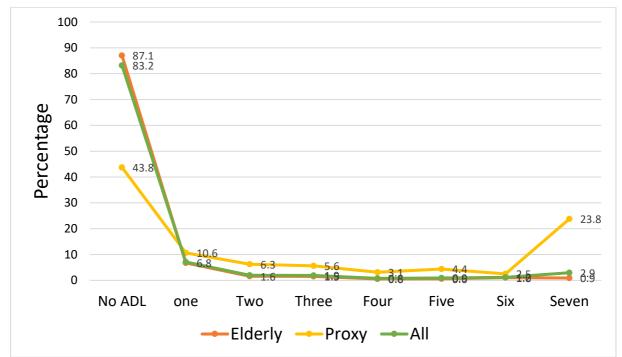


Figure 4.1: The distribution of activity daily living difficulty index by type of questionnaire

The second measure of disability is impairment. Respondents were asked specifically about two sensory impairments: eyesight and hearing capacity. Hearing and vision problems were identified if the respondents had difficulties even though they used glasses or hearing aids. Impairment is a dichotomous variable. The elderly with vision and hearing impairment are coded as one and zero for no impairment.

Table 4.3: The percentage of	f impairments among 6	0 and older by type o	fouestionnaires
Table net the percentage of	i inipaninonito aniong o	o ana olaol sy type o	quoononnunoo

Impairment	All (N: 1,805)			Elderly	/ (N: 1,0	645)	Proxy (N: 160)		
	Female	Male	All	Female	Male	All	Female	Male	All
Vision problem	39.7	34.5	37.4	38.1	32.6	35.6	51.8	66.0	56.1
Hearing problem	20.5	18.3	19.5	14.9	15.5	15.1	66.4	63.8	65.6
Vision and Hearing	15.7	13.1	14.5	12.3	11.3	11.8	42.5	42.6	42.5

Bold: P Value < .05

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Table 4.3 describes that more than 14 percent of older people had problems with vision and hearing. The disability among older persons where the proxy questionnaire was used is

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

much higher than those older persons who could respond directly to the questions. More than 42 percent of older persons were reported by their carer as having difficulties with hearing and vision.

4.2.3 Psychological distress

The third measurement is psychological impairment (mental illness). I will focus on the older people's questionnaire as the proxy questionnaire contains no questions on the psychological situation of older persons. As a result, the number of cases covered here is reduced from 1,805 respondents to 1,645 respondents. Mental illness includes cognitive, emotional, and behavioural problems including Alzheimer's, depression and anxiety disorder (Quadagno, 2008). This chapter refers to mental illness and anxiety disorder. Andresen, Malmgren, Carter, and Patrick (1994) argued that screening for mental illness is an integral part of a comprehensive health status assessment, as it is often associated with a decline in physical health. Anxiety symptoms were measured with the 7-item Generalized Anxiety Disorder Scale (GAD-7).

Anxiety Symptoms	Not at all	Several days	More than half	Every day
Feeling nervous, anxious or on edge	71.9	22.7	3.0	2.4
Not being able to stop or control worrying	90.9	7.5	0.9	0.7
Worrying too much about different things	86.9	9.7	1.8	1.6
Trouble relaxing	91.3	6.1	1.6	1.0
Being so restless that is hard to sit still	92.8	5.5	0.8	0.9
Being easily annoyed or irritable	87.3	8.6	2.9	1.2
Feeling afraid that something awful might happen	91.6	6.4	1.0	1.0

Table 4.4: The percentage of older persons who have anxiety symptoms (N:1,645)

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

The GAD-7 scale is the most prominent diagnostic features of the DSM-IV diagnostic criteria A, B, and C for generalized anxiety disorder. On the GAD-7, subjects are asked how often during the last two weeks they have been bothered by each of the seven core symptoms of generalized anxiety disorder. Response options are "not at all", "several days", "more than half the period" and "nearly every day" scored as 0, 1, 2, and 3 respectively. The resulting scores range from 0 to 21, with scores of \geq 5, \geq 10, and \geq 15 representing mild, moderate, and severe anxiety levels respectively (Löwe et al., 2008). To identify anxiety symptoms in the general population, I used score 5 as a cut off and coded in binary responses in which one indicated the presence of anxiety symptoms and zero indicated low or no anxiety symptoms.

There are seven items questioned in GAD-7 including feeling nervous, anxious or on edge; not being able to stop or control worrying; worrying too much about different things; trouble relaxing; being so restless that is hard to sit still; being easily annoyed or irritable; and feeling afraid that something awful might happen. Table 4.4 shows the percentage of older persons who have anxiety symptoms. Using score 5 as a cut off high risk of anxiety problem at community level, it was found that just over 6 percent of older persons have anxiety symptoms.

4.3 Factors of poor health among older people

As outlined in Chapter 2, three groups of factors might influence the health status and disability level of older persons, including socio-demographic exposure, coping capacities and participation in family and community activities (Schröder-Butterfill & Marianti, 2006; Van Minh et al., 2012; Cao and Rammohan, 2016; Glass et al., 2006). Table 4.5 describes the bivariate analysis of factors of poor health.

				r People		ilony	Proxy			
		Hypertension		isability I: 1,645)	Anxiety	Hypertension		isability N: 160)		
Ν	%	(N: 1,337)			(N: 1,645)	(N: 129)		Impairment		
984	54.9	52.9	14.8	12.3	8.5	55.4	55.8	42.5		
810	45.2	42.5	10.9	11.3	3.7	39.1	57.5	42.6		
970	53.7	45.0	6.7	5.1	6.8	50.0	44.8	24.1		
539	29.9	50.0	15.4	17.7	6.0	47.5	47.2	34.0		
296	16.4	58.6	34.4	27.5	4.6	50.8	66.7	55.1		
633	35.1	46.8	11.5	9.5	5.3	41.9	57.5	42.5		
1,172	64.9	46.8	16.2	16.7	8.3	53.5	55.7	42.5		
938	53.3	48.7	15.5	12.8	6.1	50.7	64.0	43.0		
505	28.7	46.9	7.4	7.6	5.6	43.8	55.0	35.0		
284	16.5	48.2	15.1	14.3	7.8	51.9	41.0	51.3		
34	1.9	51.5	8.8	17.7	14.7	NA	NA	NA		
246	13.6	NA	27.9	16.9	6.8	NA	55.6	33.3		
215	11.9	66.5	10.8	12.3	19.2	66.7	100.0	66.7		
368	20.4	54.2	10.6	11.8	9.4	61.8	46.0	37.8		
307	17.0	41.6	10.5	8.6	2.6	56.7	61.5	33.3		
339	18.9	39.7	6.3	4.7	1.9	36.8	47.6	38.1		
330	18.3	42.0	14.6	18.1	1.4	32.4	52.4	52.4		
	984 810 970 539 296 633 1,172 938 505 284 34 246 215 368 307 339	984 54.9 810 45.2 970 53.7 539 29.9 296 16.4 633 35.1 1,172 64.9 938 53.3 505 28.7 284 16.5 34 1.9 246 13.6 215 11.9 368 20.4 307 17.0 339 18.9	N % (N: 1,337) 984 54.9 52.9 810 45.2 42.5 970 53.7 45.0 970 53.7 45.0 539 29.9 50.0 296 16.4 58.6 0 11.172 64.9 46.8 1,172 64.9 46.8 1,172 64.9 46.8 1,172 64.9 46.8 1,172 64.9 46.8 1,172 64.9 46.5 284 16.5 48.2 34 1.9 51.5 284 16.5 48.2 34 1.9 66.5 368 20.4 54.2 307 17.0 41.6 339 18.9 39.7	N % (N: 1,337) ADLs 984 54.9 52.9 14.8 810 45.2 42.5 10.9 970 53.7 45.0 6.7 539 29.9 50.0 15.4 296 16.4 58.6 34.4 633 35.1 46.8 11.5 1,172 64.9 46.8 16.2 938 53.3 48.7 15.5 505 28.7 46.9 7.4 284 16.5 48.2 15.1 34 1.9 51.5 8.8 2246 13.6 NA 27.9 215 11.9 66.5 10.8 368 20.4 54.2 10.6 307 17.0 41.6 10.5 339 18.9 39.7 6.3	N % (N: 1,337) ADLs Impairment 984 54.9 52.9 14.8 12.3 810 45.2 42.5 10.9 11.3 970 53.7 45.0 6.7 5.1 539 29.9 50.0 15.4 17.7 296 16.4 58.6 34.4 27.5 633 35.1 46.8 11.5 9.5 1,172 64.9 46.8 16.2 16.7 938 53.3 48.7 15.5 12.8 505 28.7 46.9 7.4 7.6 284 16.5 48.2 15.1 14.3 34 1.9 51.5 8.8 17.7 246 13.6 NA 27.9 16.9 215 11.9 66.5 10.8 12.3 368 20.4 54.2 10.6 11.8 307 17.0 41.6 10.5 8.6 <td>N % (N: 1,337) ADLs Impairment (N: 1,645) 984 54.9 52.9 14.8 12.3 8.5 810 45.2 42.5 10.9 11.3 3.7 970 53.7 45.0 6.7 5.1 6.8 539 29.9 50.0 15.4 17.7 6.0 296 16.4 58.6 34.4 27.5 4.6 633 35.1 46.8 11.5 9.5 5.3 1,172 64.9 46.8 16.2 16.7 8.3 938 53.3 48.7 15.5 12.8 6.1 505 28.7 46.9 7.4 7.6 5.6 284 16.5 48.2 15.1 14.3 7.8 34 1.9 51.5 8.8 17.7 14.7 246 13.6 NA 27.9 16.9 6.8 215 11.9 66.5 10.8</td> <td>N % (N: 1,337) ADLs Impairment (N: 1,645) (N: 129) 984 54.9 52.9 14.8 12.3 8.5 55.4 810 45.2 42.5 10.9 11.3 3.7 39.1 970 53.7 45.0 6.7 5.1 6.8 50.0 539 29.9 50.0 15.4 17.7 6.0 47.5 296 16.4 58.6 34.4 27.5 4.6 50.8 7 53.3 46.8 11.5 9.5 5.3 41.9 1,172 64.9 46.8 16.2 16.7 8.3 53.5 938 53.3 48.7 15.5 12.8 6.1 50.7 505 28.7 46.9 7.4 7.6 5.6 43.8 284 16.5 48.2 15.1 14.3 7.8 51.9 34 1.9 51.5 8.8 17.7 14.7 N</td> <td>N % (N: 1,337) ADLs Impairment (N: 1,645) (N: 129) ADLs 984 54.9 52.9 14.8 12.3 8.5 55.4 55.8 810 45.2 42.5 10.9 11.3 3.7 39.1 57.5 970 53.7 45.0 6.7 5.1 6.8 50.0 44.8 539 29.9 50.0 15.4 17.7 6.0 47.5 47.2 296 16.4 58.6 34.4 27.5 4.6 50.8 66.7 1,172 64.9 46.8 11.5 9.5 5.3 41.9 57.5 1,172 64.9 46.8 16.2 16.7 8.3 53.5 55.7 938 53.3 48.7 15.5 12.8 6.1 50.7 64.0 505 28.7 46.9 7.4 7.6 5.6 43.8 55.0 284 16.5 48.2 15.1</td>	N % (N: 1,337) ADLs Impairment (N: 1,645) 984 54.9 52.9 14.8 12.3 8.5 810 45.2 42.5 10.9 11.3 3.7 970 53.7 45.0 6.7 5.1 6.8 539 29.9 50.0 15.4 17.7 6.0 296 16.4 58.6 34.4 27.5 4.6 633 35.1 46.8 11.5 9.5 5.3 1,172 64.9 46.8 16.2 16.7 8.3 938 53.3 48.7 15.5 12.8 6.1 505 28.7 46.9 7.4 7.6 5.6 284 16.5 48.2 15.1 14.3 7.8 34 1.9 51.5 8.8 17.7 14.7 246 13.6 NA 27.9 16.9 6.8 215 11.9 66.5 10.8	N % (N: 1,337) ADLs Impairment (N: 1,645) (N: 129) 984 54.9 52.9 14.8 12.3 8.5 55.4 810 45.2 42.5 10.9 11.3 3.7 39.1 970 53.7 45.0 6.7 5.1 6.8 50.0 539 29.9 50.0 15.4 17.7 6.0 47.5 296 16.4 58.6 34.4 27.5 4.6 50.8 7 53.3 46.8 11.5 9.5 5.3 41.9 1,172 64.9 46.8 16.2 16.7 8.3 53.5 938 53.3 48.7 15.5 12.8 6.1 50.7 505 28.7 46.9 7.4 7.6 5.6 43.8 284 16.5 48.2 15.1 14.3 7.8 51.9 34 1.9 51.5 8.8 17.7 14.7 N	N % (N: 1,337) ADLs Impairment (N: 1,645) (N: 129) ADLs 984 54.9 52.9 14.8 12.3 8.5 55.4 55.8 810 45.2 42.5 10.9 11.3 3.7 39.1 57.5 970 53.7 45.0 6.7 5.1 6.8 50.0 44.8 539 29.9 50.0 15.4 17.7 6.0 47.5 47.2 296 16.4 58.6 34.4 27.5 4.6 50.8 66.7 1,172 64.9 46.8 11.5 9.5 5.3 41.9 57.5 1,172 64.9 46.8 16.2 16.7 8.3 53.5 55.7 938 53.3 48.7 15.5 12.8 6.1 50.7 64.0 505 28.7 46.9 7.4 7.6 5.6 43.8 55.0 284 16.5 48.2 15.1		

Table 4.5: Sample characteristics of older people by poor health indicators and interview method

Variable	Tot	al		Olde	r People		Proxy			
			Hypertension Disability (N: 1,645)			Anxiety	Hypertension		isability N: 160)	
	Ν	%	(N: 1,337)		Impairment	(N: 1,645)	(N: 129)		Impairment	
Coping Capacities										
Education Attainment										
None or less than primary	667	37.2	45.8	16.8	18.0	6.3	55.4	55.6	44.4	
Primary	828	46.2	47.7	10.5	9.3	6.0	42.6	53.9	34.6	
Secondary +	299	16.7	53.3	11.7	6.0	6.7	47.1	66.7	55.6	
Livestock Ownership										
Yes	1,027	57.3	44.9	12.5	11.2	7.0	47.8	53.7	42.7	
No	767	42.8	51.5	13.6	12.6	5.2	51.7	59.0	42.3	
Access to Health Insurance (BPJS/KIS)										
Yes	761	42.4	50.0	12.0	10.4	6.1	50.0	54.0	47.4	
No	1,034	57.6	46.5	13.7	12.8	6.4	49.2	57.9	38.2	
Socio-Economic Status										
Poor	602	33.4	48.1	16.8	16.6	7.1	62.3	56.9	38.5	
Medium	604	33.5	48.5	10.2	10.9	6.7	40.0	53.7	51.9	
Good	599	33.2	47.5	12.0	8.1	5.0	41.7	58.5	36.6	
Farmland Ownership										
Yes	1,125	62.7	48.8	14.8	12.3	5.2				
No	669	37.3	46.9	9.6	10.9	6.9				
Participation										
Religious Attendance										
Often	893	54.4	47.2	6.4	8.6	5.7				
Sometimes	468	28.5	47.2	12.6	13.7	4.1				
Never	281	17.1	53.0	34.2	18.9	11.4				
Working										
Yes	1,037	57.8	44.3	5.5	8.4	5.8				

Variable Total					Olde	r People		Proxy		
				Hypertension	lypertension Disability (N: 1,645)		Anxiety	Hypertension	Disability (N: 160)	
		N	%	(N: 1,337)	ADLs	Impairment	(N: 1,645)	(N: 129)	ADLs Impairme	nt
No		758	42.2	53.8	25.0	17.4	7.0			
Caring Roles										
Yes		421	25.6	52.6	10.0	8.1	5.7			
No		1,224	74.4	46.4	14.0	13.1	6.5			

Bold: P Value < .05 Source: Calculated from 2016 Ageing in Rural Indonesia Survey

4.3.1 Socio-demographic exposure

Socio-demographic exposure refers to a subgroup of older persons who are at higher risk (Schröder-Butterfill & Marianti, 2006). These include being spouseless, childless, female, "oldest-old", living outside Java, and ethnicity. Table 4.5 shows that the composition of respondents was 55 percent female and 45 percent male. In general, women have significantly higher prevalence rates of most health indicators than men. For instance, women are more significantly likely to have anxiety disorders at 8.5 percent than men at 3.7 percent. However, there is no significant difference among elderly men and women in the proxy questionnaire. Table 4.5 also reveals unsurprisingly that the health status of older people deteriorates as respondents age. For instance, 45 percent of older persons at the age of 60-69 years have hypertension and this increases significantly to 58.6 percent when they are at the age of 80 and over. Spouseless older people have significantly higher percentages of disability and mental health problems.

Almost half of the respondents are Javanese (Giriasih, Bugoharjo and Rejoagung), and the rest are Sundanese, Balinese and Batak Toba. Table 4.5 describes the variations of health status among older people across villages. In general, Javanese have better health outcomes than non-Javanese. For instance, the Javanese in Rejoagung have hypertension at much lower rates (just below 40 percent) compared to 66.5 percent among older people in Muara (Batak Toba), 54.2 percent among older people in Java also have lower anxiety symptoms than those living outside Java. As the percentage of older people who experience anxiety symptoms is very low, the villages will be collapsed into two groups – Javanese and non-Javanese – in the multivariate analysis.

4.3.2 Coping capacities

Coping capacities include attaining higher education, coming from higher income families, frequent attendance of religious activities, land and livestock ownership and access to health insurance (Schröder-Butterfill & Marianti, 2006). The majority of the respondents (46 percent) had primary education, 37.4 percent did not have education or had less than primary education, and around 17 percent had attended secondary school or higher. Table 4.5 (p. 93-95) describes that the percentage of the sample who had disabilities decreases according to increasing education level (elderly questionnaire). However, there is no significant difference for other poor health measures.

The next listed coping capacities are owning assets including land and livestock ownership. More than half of the elderly have land and livestock. Sixty-three percent of older people own land either individually or through their family. Unfortunately, land ownership is only asked about in the older people's questionnaire and is omitted in the proxy questionnaire. Perhaps surprisingly, Table 4.3 shows no significant difference in health status between older people who have land and those who do not.

Health insurance programs can be categorized as one element of coping capacity that protects against vulnerability. More than half of older persons (57.6 percent) lack health insurance, both national health insurance (BPJS) and health insurance for the poor (KIS). Table 4.3 shows that there is no association between having health insurance and health status. Older people from higher socio-economic families are considered as having higher coping capacities than others. Socio-economic status, which refers to household income per capita, was calculated by the percentiles of lowest, medium and highest family income. The socio-economic status of older persons has a significant association with disability though there is no association with other poor health measures. The older persons of higher social class are more likely to have lower disability levels. For instance, just over 8 percent of older persons from relatively rich families are experiencing difficulties in listening and seeing, while the percentage doubles at 16.6 percent among older persons from low income families.

4.3.3 Participation or engagement in family care, religious and economic activities

The participation question is only asked in the older persons' questionnaire (Questionnaire B). Therefore, table 4.5 (p. 93-95) does not mention results for the proxy questionnaire. Participation refers to religious activity attendance, economic activity and caring roles in a family. Most older persons (54.4 percent) stated that they often attend religious activities. It was followed by the older persons who sometimes attended religious activity (28.5 percent), and those who never attended (17.1 percent). Religious activity attendance has a significant association with disability levels and anxiety symptoms. The percentage of older persons who have disabilities shows a significant decrease as religious attendance rises. More than half of older people are still working. The older people who are active economically have significantly lower percentages of hypertension and disability. In addition to participation in religious and economic activities, older people also engage in family responsibilities such as providing care for grandchildren and ill family members. Table 4.5 (p. 93-95) shows that more than a quarter of respondents engage in caring responsibilities. The elderly who have caring responsibilities have significantly higher hypertension but a lower disability level in general.

4.4 Health Inequalities of older persons across socio-demographic characteristics

The World Health Organization (2013) argued that the simplest way to measure inequality is through difference and ratio. Logistic regression analysis was performed to analyse the odds ratios of the health status predictors. Logistic regression was performed to analyse the association between three measures of poor health including physical health (hypertension), disability and psychological problems. The outcome variable in this model is poor health. Hypertension is measured by objective blood pressure. Disability is measured in two ways. The first is that "disabled older persons" refers to older persons who have difficulties in performing one or more Activities of Daily Living (ADLs). The second is that "disabled older persons" refers to those with sight and hearing problems. Mental health is measured by anxiety symptoms (GAD-7). To identify older persons who are at high risk of anxiety in the general population, I used score 5 as a cut-off.

For the purpose of analysis, the health status of older people is then assigned by use of a binary dependent variable, a value of one if the individual has poor health and zero if the individual is healthy. The logistic regression method in the analysis assumes that older persons have two conditions: poor health or good health. The probability of their situation depends on the factors influencing their health which are grouped into three groups: namely, sociodemographic exposure, coping capacity and social engagement. The Hosmer-Lemeshow test was employed to determine how well the model fitted. The table below describes the odds ratio of the correlates of various health conditions among the elderly by type of questionnaire (elderly and proxy).

Table 4.6 shows two models of correlates of poor health among older people. The first model includes all the sample, using both elderly and proxy questionnaires. The second model excludes the proxy questionnaire as it contains no questions on social engagement variables. The model as a whole suggests that the influence of independent variables on health status is significant (p<0.05). The result showed significant inequalities in health depending on sex, age, ethnicity/region, social class and social engagement whereas the effect of marital status was less apparent. In the model displayed in Table 4.6, I tried to analyse the interaction between sex and age group; sex and caring roles, sex and education attainment, sex and region or ethnicity as well as sex and socio-economic status. However, there is no apparent interaction between sex and other variables.

Table 4.6: Logistic regression model: the odds ratios of determinant of poor health among older persons

	Hum	ortonoion						
	пур	ertension		ADLs	Im	pairment	Anxiety	
INDEPENDENT VARIABLES	All	Exclude Proxy	All	Exclude Proxy	All	Exclude Proxy		
	N: 1,465	N: 1,334	N: 1,795	N: 1,640	N: 1,795	N: 1,640	N: 1,640	
Male (VS Female)	0.632 ***	0.660 ***	0.681 **	1.070	1.081	1.283	0.477 ***	
Age group (VS 60-69)								
70-79	1.233	1.277 *	2.503 ***	1.965 ***	3.431 ***	3.125 ***	0.773	
80+	1.617 ***	2.049 ***	7.861 ***	3.509 ***	6.914 ***	4.479 ***	0.512 *	
Married Vs Unmarried	1.045	1.041	1.015	1.177	0.724 *	0.737	0.698	
Child Presence/Migration (Vs Migrant Only)								
Both migrant and non-migrant	0.983	0.957	1.884 ***	1.632 **	1.331	1.244	1.007	
Non-migrant only	0.914	0.918	1.547 *	1.154	1.346	1.136	1.140	
No children	1.172	1.206	0.731	0.871	1.529	1.622	2.619 *	
Javanese VS Non-Javanese	0.653 ***	0.594 ***	1.049	1.478 **	0.503 ***	0.535 ***	0.307 ***	
Education Attainment (VS Non or less than primar	y)							
Primary	1.184	1.253 *	0.853	0.872	0.658 **	0.660 **	0.999	
Secondary +	1.640 ***	1.671 ***	1.284	1.432	0.689	0.497 **	1.596	
Livestock Ownership (Vs None)	0.843	0.834	0.863	0.876	0.952	0.979	1.883 ***	
Access to Health Insurance (VS None)	1.113	1.145	1.008	0.846	1.006	0.892	0.847	
Socio-economic Status (Vs Poor)								
Medium	0.995	1.080	0.657 **	0.648 **	0.744 *	0.661 **	0.839	
Rich	0.833	0.886	0.745 *	1.014	0.523 ***	0.501 ***	0.603 *	
Working (Vs None)		0.816		0.239 ***		0.680 **	0.938	
Own land (Vs None)		1.070		1.918 ***		1.264	1.284	
Religious Attendance (Vs Often)	1	T						
Sometimes		0.855		2.243 ***		1.205	0.539 **	
Never		0.854		5.811 ***		1.130	1.733 *	
Has Caring Roles (Vs None)		1.307 **		1.130		0.814	0.867	

Note: - significance level *** p<0.01, ** p<0.05, *, p<0.1. Source: Calculated from 2016 Ageing in Rural Indonesia Survey

I also analysed the best fit model between a model with interaction and without interaction. However, there is also no significant difference between the two models. Therefore, in the analysis, I displayed the model without interaction (Table 4.6). In this sub-section, I will focus the discussion on health inequalities by gender, social class, region/ethnicity and social engagement.

4.4.1 Health inequalities by Sex

In the literature, the reasons that gender matters in health have been analyzed widely. Macintyre, Hunt, and Sweeting (1996), for instance, maintain that women are encouraged to voice their pain and men to hide it. Women may be more willing to talk about health problems than are men (J. E. Phillips et al., 2010). Local concepts of masculinity might influence men to hide discomfort and illness. Mogil and Bailey (2010) cited by Thristiawati (2015) stated that medical studies illustrated that women have evolved sensory mechanisms allowing them to experience and express pain. Sally et al. (1996) explained that women are more sensitive than men to bodily discomforts and more willing to report illness. This might contribute to the higher rates of morbidity among women (Macintyre & Sweeting, 1996). However, this argument might not totally explain why gender matters in health in rural Indonesia as this argument might be relevant to the self-reported approach. In the model, disability and anxiety measures are using the self-reporting method while hypertension is an objective measure. The variation in blood pressure readings among elderly men and women might not be explained by their likelihood of pain expression.

Type of Health Facilities	Sex	All	
Type of fleatting actities	Female	Male	All
Public Hospital	2.4	3	2.7
Community Health Centre	10.7	9.7	10.3
General Practitioner	11.1	11.2	11.1
Midwife/Paramedic	15.9	12.1	14.2
Others	0.5	0.7	0.6
None	59.5	63.3	61.2

Table 4.7: Percentage of older persons reporting using health facilities last month

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Sweeting (1994) maintained that the higher rates of female morbidity might be caused by the fact that women have more contacts with the medical profession. This argument might however not explain health inequalities among elderly men and women in rural Indonesia as there is no significant difference between men and women in contacting the medical profession (Table 4.7). The chi square and Cramer's V test was employed to analyse the association and strength of association between sex and contacting medical services and found that there is no association between sex and contacting health professionals (p-value = 0.227 and Cramér's V = 0.0619).

For adults, biological aspects such as genetics, prenatal hormone exposure and natural hormonal exposure may contribute to differences in health (Bird & Rieker, 1999). However, biological theories are considered as insufficient explanation for the higher likelihood of poor health among the female elderly (Rieker & Bird, 2005). This chapter argues that the system in the family and community manifested in socio-cultural factors might influence the significant observed variation between elderly men and women. The system can create and exacerbate underlaying health differences. Health differences might reflect gender inequalities across their life course reflected in differences in caring roles, labour force participation, social networks and leisure activities.

4.4.1.1 Caring roles of the elderly

The higher prevalence of female disability and illness might reflect gender inequality in the community. One of the ways culture defines gendering is through labour division (Banwell, 2013). The role of carer is often attached to women, including older women. The family system often assumes all women will take roles as care providers for family members (the detailed role of elderly women as care providers is elaborated further in Chapter 5). The logistic regression (Table 4.6) showed that older people with caring responsibility are more likely to suffer hypertension. Those with caring responsibility have a 30 percent significant higher possibility of incurring high blood pressure than older people without such responsibility. However, caring responsibility seems not to have any association with other poor health conditions.

In rural areas, elderly women are responsible for domestic work such as cooking, preparing food, shopping, housekeeping, caring for ill family members, providing cash and taking care of grandchildren. An elderly man of 62 years living with his wife and a son, for instance, said that domestic work is his wife's responsibility when I asked about responsibility for domestic tasks. He added that generally in his village, domestic chores were women's responsibility (Bugoharjo, 4/02/2017 M29LT). Similarly, an elderly woman, at the age of 65 who is living with her spouse only, stated that domestic work was her responsibility and sometimes her husband helped if he had time. However, she complained of her domestic burden as her husband did not want to do laundry even though they owned a washing machine (Buleleng, 7/03/2017, F68BI). Those domestic chores are part of caring activities. In ageing research, the role of care provider is often conceptualized as "intergenerational transfer" or "reciprocity" between children and elderly parents (Beard & Kunharibowo, 2001; Keasberry, 2001; A. Utomo

et al., 2019). These kinds of roles performed by older adults resembles what Ruth Benedict (2005) described as a culturally accepted role for older adults.

The division of labour in the household and caring practices are based on social norms in the communities. The norms dictate which family member is supposed to perform which tasks. It is a norm that cooking and doing laundry as in the above cases are the responsibility of women. As a norm it becomes a habit. As a habit, it is practiced and becomes social behaviour. Individual health in later life might be influenced by this broad range of individual and social practices. Variations in health status by gender provide further evidence for the idea that gender roles are among the most powerful influences.

The case of Tina (Chapter 2) illustrates the burden for an elderly women who cared for other elderly relatives. As a woman, Tina had to take care of her two frail aunts. Her poor condition, her disease and limited support from other relatives made her life very difficult. Besides caring for family members, many older people particularly elderly women are taking care of their grandchildren as their grown-up children migrate to cities and leave their children with their elderly parents. Noveria (2015) found that many older people provided support for their families, especially the care for grandchildren who are left behind by their migrant parents. One-fourth of households interviewed mentioned older people as the main care provider for left-behind grandchildren (Noveria, 2015). The Ageing in Rural Indonesian Survey reported that just over 15 percent of older persons were responsible for the care of grandchildren. According to local leaders, the tendency of the elderly to care for grandchildren is steadily increasing. For instance, the head of Giriasih village said:

Many of the elderly people are taking care of grandchildren here...the trend of the elderly who are taking care of grandchildren is increasing from time to time, I do not know by how many percent, I would say just below 5 percent (Giriasih, 27/12/2016, M1GKT).

Culturally, taking care of grandchildren is common among older women. Women are often characterized or stereotyped as nurturing and caring personalities (Kandal, 1988). Picture 4.1 and picture 4.2 describes the grandchild care activities conducted by elderly women. Picture 4.1 and picture 4.2 were purposefully sampled as it represents the socio-cultural context of gender roles in rural areas. The dominant discourse on gender roles is inextricably linked to their sex. The photos show the practice of caring conducted by elderly women in rural Indonesia. The persons in the images are female, and it is clearly evident that their gender performance occurs in the realm of the feminine habitus. Pictures 4.1 and 4.2 describes two elderly women carrying their grandchildren. Both look very tired. Picture 4.1 describes an elderly woman walking very slowly on a quiet road carrying an umbrella to protect her grandchild from the sun, and at the same time she holds her grandchild's slippers in one

hand. The grey hair reveals that she is very old. As she has difficulties in carrying her grandchild, she uses a stick to help her balance. Picture 4.2 describes another elderly woman carrying her grandchild while buying vegetables in the traditional market for her small restaurant. Her economic activities do not exempt her from her caring responsibility.





Picture 4.1: Taking care of grandchild (photo taken on 29/9/2015)

Picture 4.2: Taking care of grandchild (photo taken on 5/9/2016)

Caring for a grandchild is part of a grandmother's responsibility as expressed by Ijah, an elderly woman of 73 living with her grandson who is only 12 years old. Even though Ijah suffered from an illness, she said that no one else could take care of the grandchild as her daughter had moved to Jakarta for work. She was often distressed, thinking of her grandson's future as she said:

Who will take care of my grandson, my grandson's father already died, and my daughter has been in Jakarta for five years working as a street food seller, but she is not successful yet. I raise my grandson by myself. The truth is that my body is not strong, very weak, but I have to be patient. I feel sad thinking about my grandson (Bugoharjo, 5/02/2017, F32LJ).

The narrative of ljah describes that older people have to act as caregivers, while at the same time they themselves are actually in need of care, due to illness and frailty. Ijah expressed her burden in caring by stating "my body is not strong, very weak". It indicates the difficulties and "burden" in caring for her grandson at her age. Looking after young children can create burdens for them. It also indicates powerlessness as she has no choice. Her children's migration places her at a disadvantage with limited support as she assumes the additional burden taking of caring for a grandchild. This burden also forced her to work despite her age, to fulfil her and her grandchild's needs. She does not own land as she is poor. So, she rents a

rice field to earn money. Even though she is unable to cultivate the land and has difficulty in walking medium and long distances, she forces herself to manage rice cultivation by asking people to work for her. In this context, working women have the double burden as they have to perform their best in both worlds, at work and home (I. D. Utomo et al., 2008).

The burdens for older people of caring for grandchildren has attracted the attention of local leaders. The village head of Giriasih, for instance, maintained that in the past when couples were growing older, they resembled a bride and groom as they lived with each other only. But now older people were bothered by the need to care for grandchildren. Ideally, older people should not have such tasks. It was previously not thought appropriate for older people to be the main carer of their grandchildren. It would be better if they cared for grandchildren only sometimes (Giriasih, 27/12/2016, M1GKT). Similarly, a local leader in Bugoharjo maintained that when young people migrated, they tended to leave their children with their older parents. The grandchildren were usually undertaking their schooling in the village. As not all adult children were successful in the city, the grandchildren were left behind with their grandparents to ease the burdens of the migrated children. Therefore, most older people were living with their grandchildren. A few older people did not want to live with their grandchildren as they had sufficient burdens in the past in raising their own children (*karena dah direpoti anaknya*) (Bugoharjo, 4/02/2017 M29LT).



Picture 4.3: Carrying firewood for cooking (photo taken on 29/9/2015)

Picture 4.4: Carrying firewood for cooking (photo taken on 07/01/2017)

As a carer for their families in a rural context, elderly women also have responsibility for domestic works, including doing the cooking. Before cooking, some elderly women have to walk long distances, between two to eight kilometres, to a water source to get clean water from the water spring and to look for firewood for cooking. The picture below describes the practice of gathering firewood in rural Indonesia.

Picture 4.3 and 4.4 depict elderly women collecting firewood in rural areas. Picture 4.4 shows that rain did not prevent a woman in her 80s carrying heavy amounts of firewood. They are forced to this due to the difficult economic situation and their role as carer in their family. In this role, they have to prepare food for their spouses and other family members. Part of preparing food is collecting firewood for cooking.

Those pictures (picture 4.1 to picture 4.4) show that elderly women are more exposed to hazards associated with caring that might affect their health. Hochschild (1989) stated that the burden of household responsibility produced sustained high levels of stress. More exposure to stress leads to health disparities between elderly men and women. Moreover, the International Labour Organization (ILO) noted various hazards associated with caring activities such as smoke from cooking activities, preparing foods, looking for firewood, carrying water, sweeping and mopping. Those hazards are likely to influence health (ILO, 2008). Many of the elderly are still using traditional clay stoves. The traditional stove is likely to produce much smoke particularly when rice pulps are used for cooking (Picture 4.5). The smoke is exacerbated by inappropriate ventilation and exhaust systems in the kitchen. Hazardous substances, dust and smoke in the kitchen without appropriate ventilation are a source of poor health. Exposure to dust, fumes and smoke may cause fatigue, headache, dizziness and irritation of the eyes and throat.



Picture 4.5: Traditional Stove made from clay (photo taken on 06/02/2017)

The female elderly are also more exposed to the chemicals employed in washing clothes. They are also likely to be responsible for sweeping or brooming, often outside of the house or yard. The task requires them to bow and to bend as the broom is usually short. Mana, an elderly woman of 74 years living alone, was an example of a woman who swept not only her house regularly, but also her daughter's house and her granddaughter's house located nearby. She mentioned that she did not want her daughter and granddaughter to feel ashamed because of a messy yard (Cacaban, 17/02/2017, F19SI). Repetitive bowing and bending may cause muscle and joint problems, back injuries, and neck and shoulder disorder (ILO, 2008). Based on this explanation, the health inequality between men and women might come from social attitudes in the community which determine role-related activities and gender differences, and which provide men and women with different and unequal resources and exposure to health risks.

Family care also takes much time. The Aging in Rural Indonesian Study reported that the average hours spent in providing care is 52 hours per week. Fifty-two hours in providing care is considered excessive and it is notably more than the theoretical normal working hours of 40 hours in a week. The average hours spent in providing care reported in the survey are much higher than the average hours reported in a survey in Bangladesh. That survey found that women spent around 31 hours a week in unpaid work such as cooking, looking after children, collecting fuel, food and water compared to men who spent only 14 hours a week on unpaid activities such as house repair. Women spent around 56 hours a week in paid work compared to men at 53 hours (WHO, 2001). Women also continued to spend significantly more time on housework than men, and this pattern was true whether or not women were employed (Chafetz, 2006). The excessive working hours in providing care are likely to influence the poor health of older people.

4.4.1.2 Poor working conditions

One of the aspects of community systems that might cause inequality is poor working conditions. The higher prevalence of poor health among women may reflect the increased hazards associated with employment as more than 57 percent of older persons are still working. The pattern of working behaviour needs to be understood to analyse why elderly women are more at risk. There are two risk factors that might influence the health of the elderly women in their occupation including lifting a heavy load and ergonomic patterns relevant to their work.

The majority of older people also undertake agricultural work. Many have livestock such as cows and goats. It is common practice in rural areas to cart firewood or cattle fodder such as grass and plantation leaf from their plantation when they return home. Farmers usually bring manure from home to their plantation. They feel a loss if they have a plantation garden but do not have cattle, as manure from their cattle can be used as fertiliser, and grass or plantation leaf can feed the cattle. They feel a loss if they return home without bringing something from their plantation. The load of this practice sometimes is too heavy for their age.

The pictures below show the practice of lifting heavy loads between elderly men and women that might influence their health.



Picture 4.6: elderly woman lifting a heavy load (photo taken on 29/9/2015)

Picture 4.7: elderly man lifting a heavy load (photo taken on 5/2/2017)

Picture 4.6 describes an elderly woman at the age of around 80 and her daughter who carrying heavy firewood. The firewood is usually for sale or for their own use. The load of the firewood appears heavy. They carry the load from their plantation, often a long distance from their home, at around 3 to 4 kilometres. The hilly terrain hampers their efforts in lifting the load. In rural areas, elderly women are more likely to lift heavy loads manually as many of them cannot ride a motorcycle or bike. Manual handling, lifting, moving, and lowering heavy loads are likely to cause back pain, injury and fatigue that influences overall health (Niu & Kogi, 2012).

Picture 4.6 also illustrates the tendency of older women to use traditional clothes for daily activities. Their traditional clothes such as the sarong can reduce their mobility. It is a common practice for rural people to wear sarongs for economic activities and other daily activities. They also often walk on slippery pathways in hilly areas. Carrying loads on a slippery pathway is dangerous and is a common cause of accidents and injury. When I visited the dwelling of one of the respondents, I fell on in a slippery pathway on the way there. The Ageing in Rural Indonesia Study reported that around 22 percent of older people had falls during the last two years. A significantly higher percentage of these falls were experienced by older women (24.7 percent of women vs 18.7 percent). Older people are more vulnerable to a 107

slippery environment, particularly the pathways to their rice fields and gardens. This exposure can increase their risks of disability and damage to their health in general.

In contrast, elderly men are more likely to use a bike or motorcycle for carrying heavy loads as can be seen in picture 4.7. This depicts an elderly man of about 70 years riding his bicycle and carrying an abundant amount of grass at the back of his bicycle. The grass is usually used to feed cattle. Picture 4.7 reflects the practice of lifting and moving heavy loads conducted by senior men. Using a bicycle or motorcycle minimizes fatigue and reduces exposure to the hazards of carrying a heavy load. The practice is likely to reduce the manual handling of heavy materials that in turn influence the higher level of health status of elderly men. A paramedic (*mantri*) who often treats the older adults reported that the most common illness suffered by the elderly is soreness and pain in waists and knees, commonly among women as he stated:

The most common complaints suffered by the elderly are tiredness, soreness and pain in the waists and knees especially mostly higher for women. Secondly, they suffer from hypertension and diabetes. These complaints are different from the complaints of young people who mostly have a cough, flu and kidney problems. My patients are mostly older people, and the number is higher than other age groups (Bugoharjo, 5/02/2017, M30LT).

The statement from the paramedic strengthens the argument about manual lifting and heavy load carrying conducted by elderly women that might damage their health. Tiredness and pain in waists and knees as the most common health problem treated by the paramedic are mostly suffered by older women. Moreover, the disease or health issues suffered by older people are different from health issues suffered by young people. The most common health issues for young people treated by the paramedic are coughs, flu and kidney problems which might not directly correlate to manual handling, lifting and carrying heavy loads. On the other hand, older people often have health issues from fatigue and pain in waist and knee which could be arise from manual handling, lifting and carrying heavy loads.

In addition to lifting a heavy load, ergonomic aspects of works might also influence the health of the elderly. In rural areas, a gendered nature of occupation roles arises, where some occupations are seen appropriate based on their sex. For instance, weaving is seen as only appropriate for women and working on a fish farm is only appropriate for men. Another example is picking and sorting out cloves which is regarded as women's work, while climbing and picking up coconuts is only appropriate for men. This type of work has very different ergonomic aspects that may influence health outcomes (the detail of economic activities of older people will be discussed in Chapter 6). The pictures below describe the different ergonomics of work conducted by elderly men and women.



Picture 4.8: Ergonomic of Weaving Work (photo taken on 15/3/2017)

Picture 4.9: Ergonomic of Fish Farm Work (photo taken on 5/2/2017)

Picture 4.8 shows a woman of 76 years at her weaving loom. This type of work requires her to sit for long hours (between 5 to 8 hours) without a backrest. The monotonous ergonomic position for long hours without a backrest can cause injury and fatigue that in turn might influence the overall health of the worker. She said:

I am living alone here, my waist is painful, it has been painful for six years...I start cooking at 5 am, I do not like other people's cooking, after cooking I work until noon (Muara, 16/03/2017, F43TJ)

Weaving is a common occupation for elderly women in Muara which may not be common in other villages. Older people often weave traditional cloths which are often used for traditional ceremonies and events such as weddings and funerals. The weaving activities usually require the older people to sit for long periods, often between 5 - 8 hours or more in a day. This activity might cause back pain as mentioned above. Even though weaving is a special economic activity in Muara, the other villages also have economic activities requiring practitioners to adopt a monotonous ergonomic position such as sorting out cloves, as happens among Balinese seniors in Gunung Sari and among old *melinjo* chip workers in Giriasih.

The monotonous ergonomic work is also a physiologically hazardous factor. Physiological hazards include fatigue and working long hours in the same posture, perhaps affecting the functional status of the nervous system. Such monotonous work may lead to additional fatigue due to the continuous handling of loads, repetitive movements of both hands and wrists and awkward postures. A static working position is a risk factor for muscle problems (Reinhold, Tint, Tuulik, & Saarik, 2008).

In contrast, men tend to work with mobile ergonomics from sitting, standing, bowing and walking. Picture 4.9 describes the mobile ergonomic working arrangement of an elderly man in a fish farm. He is catching fish and moves frequently from one place to another, as well as sitting, walking and standing. A more mobile ergonomic working position reduces the hazards associated with work. Based on this explanation, the higher likelihood of poor health of elderly women can be the result of higher exposure to occupational and environmental hazards.

4.4.1.3 More choices on relaxing activities for older men

Table 4.6 (p. 99) clearly reveals that women have a higher risk of anxiety compared to men. One of the main causes is that elderly men are more likely to have more choice in relaxing activities or leisure activities than elderly women. Many of the men stated that if they got bored or felt lonely, they went fishing, engaged in arts, gambling, "hanging out" and going to coffee shops (*kedai kopi*) to meet other people, making jokes and playing chess, much of which is usually deemed inappropriate for elderly women. Andi, a man of 81 years who lives alone stated:

What makes me happy is going to the coffee shop, I go there every day, I socialise with other people there, having coffee, reading the newspaper, playing chess. Besides that I am happy reading the bible (Muara, 16/03/2017, M44TD)

The statement of Andi describes leisure time in coffee shops as important for the wellbeing of older people. As it is important for their wellbeing, some respondents recounted that they move from one coffee shop to another for coffee and to meet with other people. In Bugoharjo, there are eight small coffee shops while in Muara, particularly in Silali Toruan village, there are two. The coffee shops usually open from 7 am to 10 pm but some of them are open to midnight. The picture below describes one of the leisure activities of senior men.





Picture 4.10: Leisure activities in coffee shops in Muara (photo taken on 15/3/2017)

Picture 4.11: Leisure activities in coffee shops in Bugoarjo (photo taken on 03/2/2017)

Picture 4.10 and picture 4.11 describes the leisure activities of elderly men in coffee shops. Picture 4.11 describes a man of 66 joking with young people. Having fun is one of the main reasons for the men to patronise coffee shops regularly. Johan, a man of 85 who has seven children, six of whom have moved to cities, describes hanging out in coffee shops to release stress. He feels happy when he hangs out and jokes with young people. He stated when the researcher asked him the main reason for hanging out:

For entertainment, to make my life longer (untuk memperpanjang umur)...I am happy going to coffee shops, joking around, my children are economically not settled yet, I do not know how they are, therefore to relieve my worries I go to coffee shops (Bugoharjo, 5/02/2017; M33LS)

Johan considered that happiness could be gained by hanging out in coffee shops as well as for prolonging his life. When bad weather occurred, Johan was motivated to go to coffee shops to release anxiety and worry less about his adult children in the city. Another man, aged 85 years who lived alone, mentioned that when he felt lonely at night, he just hung out at neighbourhood watch post (*pos ronda*) to socialise with other men. Another elderly man who lived alone stated that when he felt lonely, he always went fishing. Those activities might reduce stress and loneliness as well as increase and reinforce their social connections. An older person with solid social connections has higher resiliency than those with a limited circle of friends. Resilience is a significant preventive factor against the threat of psychological illness (Maneerat, Isaramalai, & Boonyasopun, 2011).

In contrast, women have limited leisure activities. The most common stated leisure activity of senior women was watching television. A few older people in Gunung Sari (Balinese) mentioned that their leisure time was occupied with gambling (*main ceki*). In Balinese culture, gambling such as *main ceki* and cockfighting (*sabung ayam*) are part of their culture. Culture determines the appropriate activities for elderly men and women. For instance, it is not seen as appropriate for women to go out at night and hang out at coffee shops. Another example is that in Bugoharjo it is not appropriate for an elderly woman to perform "older persons physical exercise" (*senam lansia*) as that would be more appropriate for young people. Cultural influence operates through leisure activities that shape appropriate and inappropriate activities for elderly men and women that in turn can influence their health.

4.4.2 Health inequalities across ethnicity and region

Gerontological scholars have generally accepted the significance of ethnicity for the ageing process (Driedger & Chappell, 2014). Table 4.6 (p. 99) indicates that ethnicity and region have significant and consistent association with health. In general, the Javanese have very substantially lower odds of poor health in three dimensions of health, except in the ADLs

category. Older people in Javanese villages (Bugoharjo, Giriasih and Rejoagung) are significantly less likely to have hypertension, lower levels of impairment and lower anxiety symptoms than their non-Javanese counterparts (older people living in Muara, Cacaban, and Gunung Sari). Variations in health status across ethnicity and region provide further evidence for the idea that ethnicity is one of the most powerful influences.

This chapter argues that there are three main reasons why Javanese older people enjoy substantially better health. The first is norms and values among the Javanese. Ethnicity provides a cultural context, which will include values and norms with regard to being old, the relationship between the old and the young and obligations and responsibilities toward older people (Niehof 1995). J. E. Phillips et al. (2010) explain why ethnicity is important to ageing. Cultural characteristics are significant in differentiating the ageing experience. The cultural approaches to the study of ethnicity often address issues of values and norms. The values of respect for the elderly in Javanese, for instance, include letting the senior persons in the house take their food first at mealtimes. The values of *pasrah* (surrender), *semeleh* (lean on God), nrimo (acceptance) among Javanese people influence their attitudes toward difficulties and insecurity in older age. Their responses, actions and feelings reveal the operation of Javanese values and norms during hard times. People might respond differently to the difficulties. The social norms among Javanese such as pasrah, nrimo and semeleh are an essential element in facing up to and dealing with difficulties. The difficulties are part of life, and older persons in this study are exposed to daily hardships. Their stories are essential to understanding their lives and perceiving the meaning of their experiences (Sandelowski, 1991).

During interviews, they narrated and responded to their health problems by referring to *pasrah* (surrender), *semeleh* (lean on God), and *nrimo* (acceptance). This response is typical of what is considered to be a Javanese characteristic as revealed by Sutarto (2006), who notes that Javanese people believe in God's design or karma that occurs outside the control of the individual. They trust in the folk wisdom "*nrima ing pandum, pandume sing kuasa Gusti Allah*" (accept the lot given to you by God). These values influence their wellbeing by responding to problems more positively. For instance, the *semeleh* did not mean to give up without trying, but *semeleh* meant putting the problem in its place in order for God to resolve it. The practice of *semeleh* might help to maintain control of emotions during a difficult situation. The head of Rehabilitation Division of Gunung Kidul Social office maintained that the secret of longevity among Javanese is *semeleh* values as he stated:

The secret of the longevity of the Javanese is semeleh, it is an attitude of receiving something as it is or to feel content with what we have (Gunung Kidul, 9/02/2017, M9GKP)

Moreover, it is a norm for the Javanese not to show their problems and keep the inner self in harmony (*rukun*) (Keasberry, 2001). Living in harmony is also a significant norm for the Javanese. *Rukun* starts within the household and expands outwards to your next-door neighbour, the block, the village, and the nation. Therefore, feeling (*rasa*) in Javanese culture is very important. It will guide attitudes to avoid conflict with other people that in turn affect their happiness.

Social Participation Items	Javanese	Non-Javanese	P-Value
Marriage or other traditional ceremonies	59.4	53.4	0.014
Cleaning up the neighbourhood	39.3	13.8	0.000
Working together to build community infrastructure	29.9	13.3	0.000
Credit rotation (arisan)	36.3	12.4	0.000
Village meeting (PKK, Dasawisma)	12.2	3.0	0.000
Neighbourhood watch	6.0	6.1	0.912
Elderly community meetings	17.0	11.0	0.000
Other meetings	3.0	3.0	0.773

Table 4.8: The percentage of social participation of older persons by ethnicity

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Moreover, Javanese people have the "*guyub*" (peaceful and togetherness) value. This value encourages people to gather with other people. It can be seen in the value of social participation in which the social participation of the Javanese is higher than non-Javanese (see Table 4.8). Higher social participation indicates higher cultural capital. Cultural capital includes both tastes and activities. Participation in cultural activities is often used as a proxy for cultural capital in quantitative studies (Byun, Schofer, & Kim, 2012; McGovern & Nazroo, 2015).

This social participation has a strong association with the disability levels of older people. The *guyub* and *rukun* values shape a measure of self-reliance among elderly Javanese to engage in community activities and social welfare programs for older persons, for instance *Posyandu Lansia/Poslansia*. To finance the program, the participants do not rely on the government. The *Poslansia* program in Giriasih, for instance, obtains community-based fundraising for their programs. One of the fundraising activities involves collecting fees of one thousand rupiah (around AUD 10 cents) per visit to the *Poslansia* program. The money is utilized to fund health checks and supplementary food for the elderly (*Program Makanan Tambahan* – Supplementary Food Program).

The *guyub* and *rukun* culture also operates through establishing "child migrant organizations" (*paguyuban anak rantau*) in the cities. This organization contributes to the development of the home village. The *paguyuban* often collect fundraising from migrated children and sends it to needy people, which of course often includes older persons in the

village (the details of adult children's contributions will be explained in Chapter 6). Besides sending money for social purposes, every year most of the emigrant children return home during *lebaran* (the Muslim fasting celebration) and share their success through charitable activities. They distribute some amount of money to their relatives, neighbours and needy people. This kind of charity is very important for poor elderly people in covering their daily needs (The details will be discussed in Chapter 5).

The norm of *pasrah* (surrender), *semeleh* (lean on God), *nrimo* (acceptance), and *guyub*, *rukun* (harmony) shape the behavior of Javanese seniors in response to their daily hardships. As social norms among Javanese, individuals believe that complying with the norm will lead to positive impacts (approval), and failing to follow the norm will lead to negative sanctions (disapproval) (Heise & Cislaghi, 2016). Zaumseil, Schwarz, Von Vacano, Sullivan, and Prawitasari-Hadiyono (2013) found that *pasrah* and *nrimo* are among coping strategies to cope with disaster. *Guyub* and *rukun* might increase social connections and resiliency levels that in turn may help to enhance their health status.

Another possible explanation for the variation of health status by ethnicity is that the kinship system of Javanese is bilateral. Kinship is a system that governs social interaction between people. It covers many aspects, including roles and responsibilities. Ethnicity creates a kinship system that provides the basis for household, family recruitment and sponsoring (Niehof 1995). The kinship system is a key factor in determining the quality of life of the older echelon. The bilateral kinship system represents a network of bilateral kin which often provides support for older persons. The bilateral kinship system provides broader networks compared to patrilineal kindship (the detail of these caring networks will be discussed in Chapter 5).

The third reason is the package of health services among elderly people living in Java provides access to a greater variety of services and tends to be of a higher quality. Each village in the research areas has a community health centre (*Puskesdes*) and an assigned midwife. However, some health programs such as the *Prolanis* program (chronic disease intervention program), mobile health services and mental health services are mostly covering only villages in Java. Indonesia's vision for social protection is stated in the constitution, which stipulates the right to social security (inclusive of social protection) for all Indonesian citizens. The exclusion of older persons in villages outside Java health programs for the elderly may contribute to health inequality among regions. Variations in health status across regions provide further evidence for the idea that region is one the most powerful influences (the extent of regional access to government programs will be discussed in Chapter 7).

4.4.3 Health inequalities by social class

Table 4.6 (p. 99) shows that education as a proxy for social class has a different direction of association based on the type of health measurement. Educational attainment has a significant association with hypertension and impairment, and less association with ADLs and anxiety levels. For physical health, the more educated the elderly, the higher their likelihood to suffer hypertension. The older persons who have secondary and tertiary education have significantly higher odds (67 percent) of suffering hypertension than those with no or less than primary education. This finding contradicted some previous research, for example Ng, Hakimi, Byass, Wilopo, and Wall (2010) who found that older people with low educational levels in Purworejo district have significantly higher odds of being in poor health compared to people with high education.

The likelihood for the more educated to incur higher hypertension might arise because the more educated the people, the more opportunity exists of having a higher living standard. Higher living standards might contribute to higher hypertension. The health status of older persons is affected by many factors including diet and exercise. Older people from a higher social class have more opportunity to eat red meat and sugary food than others. The lower social classes also have more opportunity for walking and other physical activities in their work as farmers compared to older persons from a higher social class.

In contrast with physical health, the more educated the elderly, the less likely they are to suffer from vision and hearing problems. The disability using impairment measures are lower among older people with a high education attainment. Similarly, using family income as proxy for social class also shows similar associations where the elderly from high income families have lower disability levels and lower anxiety. Abramson (2015) argued that inequalities influence the ability of people to respond to illness and its treatment. Socially disadvantaged groups have higher psychosocial stress loads, sometimes meet unequal treatment from medical institutions, and often live and work in hazardous environments.

In addition to education and socio-economic status, having assets seems to have little association with health status except for disability and anxiety measures. The older persons who own cattle are more likely to have higher anxiety levels. The older people who have land are more likely to have difficulties in one or more ADLs.

Having access to health insurance is not a good predictor of health status as we found no association between having health insurance and health status. However, in the rural context, older persons who lack health insurance are in a vulnerable situation as they get older. The older persons who have health insurance have a higher capacity to cope with distress and health problems.

4.5 Conclusion

This chapter aims to obtain insight into the current health status of older persons across regions in rural Indonesia, how and why it varies across regions, ethnicity, social class and socio-demographic groups of the ageing population with their different socio-cultural backgrounds. This chapter elaborates how social structures generate health risks and health disparities among older people. The health status of older persons varies significantly by gender, ethnicity, region and social class. This variation reflects the different geographical, cultural and societal contexts in which individual ageing is experienced.

This study found that gender inequality still persists until old age. Elderly men are significantly less likely than elderly women to have lower levels of health status in three dimensions of health including physical health, disability and mental health. The ethnographic content analysis explains that gendered norms through socio-cultural factors have different impacts on elderly women and men. Socio-cultural factors can create and exacerbate underlying health differences. Socio-cultural factors shape the positions and gender roles of elderly men and women in the family and community. The health inequality between men and women accrues from the system in the family and the community, determining role-related activities and gender differences in opportunities, which provide men and women with different and often unequal resources and exposure to health risks. Women are normally responsible for cooking, preparing food, shopping, housekeeping, caring for ill family members and taking care of grandchildren. This gender-based distribution of caring roles continues to affect women's health and wellbeing into old age. The role of women as carers for their husbands and family exposes them to stress and hazards associated with caring, including walking long distances to fetch water and firewood, smoke from cooking activities, exposure to dust and fumes, improper ventilation and exhaust systems in the kitchen, chemicals from washing clothes, repetitive bowing and bending. More exposure to caring hazards leads to health disparities between elderly men and women.

Inequalities in health can also be caused by inequalities in the work environment. The higher prevalence of disability and disease among women may reflect increased hazards associated with work including lifting a heavy load and ergonomic risks of the work they do. Elderly women are more likely to lift and carry heavy loads manually while elderly men are more likely to use bicycles or motorcycles for this purpose. Using bicycles or motorcycles minimizes fatigue and reduces exposure to the hazards of carrying heavy loads. Elderly women tend to work for long hours in a static ergonomic position such as sitting. The monotonous work may lead to increased fatigue due to the continuous handling of loads, repetitive movements of both hands and wrists and awkward postures. In contrast, elderly men

tend to work with more mobile ergonomic actions, like sitting, standing, bowing and walking. Moreover, elderly men are more likely to have greater choice of leisure activities and social gathering than their female counterparts.

In addition to gender inequalities in health, ethnicity is one of the most significant and consistent predictors of health in the four dimensions of health status. Javanese have very substantially lower odds of poor health compared to non-Javanese (Balinese, Sundanese, and Batak Toba). There are three main reasons why Javanese older people have substantially higher health status, including norms and values among Javanese people, the kinship system and greater exposure to health programs. The unequal distribution of services to older people influences health inequality across regions. Older people living on Java have better health than older people living outside Java. This unequal distribution of services to older people is the result of an uneven application of social policies and programs.

In contrast with previous research, this chapter found that the more educated the elderly were, the higher was their likelihood of suffering hypertension. This phenomenon might arise because the highly educated have more opportunity to indulge in a higher living standard and a rich (and possibly unhealthy) diet. The lower social classes also have more opportunity to walk and engage in physical activities in their work, for example as farmers, compared to older persons from a higher social class. The diet and physical activity might influence the physical health of the elderly.

If the health of an older population suffers and its determinants are socio-cultural factors, so a need to change social arrangements may emerge, and such social intervention must address the underlying cultural and social factors relating to health inequalities. It is essential to address the cultural and social factors rather than relying on medical interventions only. In other words, the disadvantaged group of older people should not be treated medically without addressing the cultural and social factors that put them at higher risk of poor health. Adequate attention to these cultural and social factors forms part of necessary efforts to satisfy the social rights and needs of older persons.

Chapter 5 - Living and Care Arrangements of Older Persons in Rural Indonesia

5.1 Introduction

In early 2018, an elderly couple was found dead in their house in Rural Magelang District. The dead bodies of the elderly couple were found around three weeks after their death. The wife (60 years old) had suffered a stroke, and her husband (70 years old) had been the only carer throughout her sickness as their children had migrated to big cities (Pertiwi, 2018). The case might describe the common living and care arrangement of older persons in rural Indonesia, where a senior citizen is living with a spouse who is the only care provider. The case also might illustrate the considerable challenges surrounding the provision of aged care in rural Indonesia. It has been noted in the literature that a high proportion of older persons in Indonesia live in rural areas, while in many cases their adult children have moved to the rapidly growing cities and towns. This pattern shows the fresh challenges posed by the new demographic balance where the younger generation are more likely to work in the formal sector, more likely to migrate for education or work, more likely to live in an urban environment and, as a result, less likely to live in a multi-generation household (Booth, 2017). Thus, this situation makes life more difficult for elderly people especially when care is increasingly needed.

Chapter 4 described how the health status of older persons varied significantly by gender, ethnicity, region and social class. Elderly women and non-Javanese were more likely to have lower health status and disability. The variation in health status affected their living arrangements and of care needs. The prevalence of chronic disease in old age in most cases required some sort of care. This chapter aims to examine the patterns, the factors affecting the provision of care and living arrangements and the factors that often exclude the elderly from the support of their children. This chapter also examines the extent to which informal, community and formal providers interact and complement each other in the provision of care to the elderly.

Extensive research has been conducted on this issue in Western countries, but less attention has been paid to this topic in Indonesia, particularly in rural Indonesia. Some studies (for example Schröder-Butterfill, 2004; Kreager and Schröder-Butterfill, 2014 Van Eeuwijk, 2006; Schröder-Butterfill and Fitri 2014) have examined the care provision of the elderly in Indonesia and found that both sons and daughters play crucial roles in providing care and support to the elderly. Filial responsibility based on religious teachings can explain the significant role of children in taking care of older parents. Sung (1998) elaborates how each major world religion such as Judaism, Christianity, Hinduism, Buddhism and Islam teach that

is a child's responsibility to address the needs of an aged parent. Those religions clearly stress the duty of a child to not only support parents, but also to honour, love and respect them as well.

A study on the impact of declining fertility rates on family support for elder persons in Thailand noted that "more than any other aspect of the social changes affecting Thailand and the third world in general, fertility decline is seen as having the most direct impact on reducing the extent to which future generations of elderly will be supported by their children" (Knodel, Chayovan, & Siriboon, 1992, pp. 94-95). According to Niehof (1995), the conditions in Thailand apply to Indonesia as well.

Although filial responsibility norms appear to permeate societies and cultures around the world, the practice may differ by culture, and is negotiated depending on various situational and contextual factors. Less attention has been given also to variations in socio-demographic background as well as how care provision operates across ethnicity, gender, social class and regions. Less attention as well has been given to factors bearing on exclusion from child support. A similar focus has been made by Gubhaju, Utomo I, McDonald and Utomo A (2019) using the same data set (ARIS 2016), who found that there is an interplay between gendered patterns, marital status, ethnicity and children's living arrangements in care and support provision. Gubhaju et al. employ only a quantitative approach comparing socio-cultural backgrounds in ten villages. This chapter employs both qualitative and quantitative approaches with smaller numbers of respondents at six villages. Gubhaju's paper focuses the discussion on the providers of care and the type of caregiving while this chapter specifically addresses the different types of living arrangements and care provision for the disabled elderly, and how care is handled as well as factors affecting the absence of support from adult children.

This chapter is broadly divided into two sections. The first section presents patterns and determinants of living arrangements, and factors affecting the living arrangements of older people. The second section analyses the patterns of care provision for the old in rural Indonesia. This section provides a discussion of care needs; who needs care and the type of care needed; who provides care for the disabled elderly, how care operates and which of the subjects are excluded from child support.

5.2 Patterns and determinants of living arrangements

The first part of the analysis examines the patterns of living arrangements of older adults. The living arrangements determine to a large extent what support they receive and from whom (Keasberry, 2001). The living arrangement concept refers to the familial system of support and care of older adults. In the absence of formal services to the elderly, older persons have to rely on persons living in their close proximity. Thus, the living arrangements become essential

components of the overall well-being of the elderly and indicate the level of actual support available to them. Most studies of older persons' living arrangements focus on household composition and categorizing broad living arrangements such as living with children, living alone and living with others. Arifin (2006), for instance, classified living arrangements into three groups: older persons living at their own house, living with a child's household, and living without children.

For the objectives of this chapter, including analysing the influence of ethnicity and other different settings (number of children, marital status, age-group and other sociodemographic characteristics), living arrangements were initially classified into six categories. The first is living with spouse only. The high migration of young people often results in a situation where older people are living with their spouse only. The second category is living with an adult son. This category encompasses an aged parent living with a son and possibly with his/her spouse and sometimes with others, often a grandchild or grandchildren and daughter in law. The main focus in this category is living with a son. The third is living with an adult daughter. This category encompasses an aged parent living with a daughter and with his/her spouse and sometimes with others, also often a grandchild or grandchildren and son in law. The main focus in this category is living with the adult daughter. The fourth is living alone. The fifth is living with relatives such as nephews, brothers and sisters. The last category is another arrangement. This category encompasses an old person living with a spouse and others, who are often grandchildren. This category also encompasses elderly people who are still living with both daughter and son. In some families particularly poor families, older parents might still live with both daughter and son before the latter are able to find their own accommodation. Table 5.1 describes the distribution of living arrangements of the elderly and the pattern of living arrangements across socio-economic and demographic characteristics of the elderly. For the purpose of analysis, to analyse the influence of ethnicity and other different settings, in bivariate and multivariate analysis, the factors associated with living arrangements will be focused on socio-demographic exposure and coping capacities (as described in Chapter 2). Health status, particularly the disability variable will be added in the analysis.

Table 5.1 reveals that the majority of elderly adults live with a spouse only at 32.7 percent, followed by living with a son or a daughter at 21 percent and 14.8 percent respectively. Co-residence with a son is more frequent than with daughters, and this pattern is similar in both Asia and Africa, but not Latin America (Bongaarts & Zimmer, 2002). Similarly, Keasberry (2001) found that almost half of the older people lived with a spouse and other(s). The number of elderly who are living alone is the fourth largest percentage at just below 13 percent. The relatively high percentage of older persons who are living alone might be explained by the high numbers of outmigration by adult children.

Background Characteristics	Ν	Living Arrangement									
-		Spouse Only	Daughter	Son	Alone	Relatives	Other Arrangement*	P-Value (Cramer's V)			
Total	1,766	32.7	14.8	21.0	12.9	5.4	13.3				
Sex								0.000 (0.28)			
Female	968	25.7	16.0	21.5	18.4	8.4	10.0				
Male	798	41.1	13.5	20.2	6.3	1.6	17.3				
Marital Status								0.000 (0.75)			
Married	1,164	49.6	12.9	18.3	0.3	0.2	18.8				
Not married	602	0.0	18.8	25.9	37.4	15.3	2.7				
Age Group								0.000 (0.16)			
60-69	955	36.3	13.3	19.1	10.1	3.7	17.6				
70-79	528	33.3	14.2	20.8	16.1	6.4	9.1				
80+	283	19.1	21.6	27.2	16.6	8.8	6.7				
Child Presence/Migration								0.000 (0.32)			
Both migrant and non-migrant	938	24.0	19.4	29.6	9.5	3.8	13.7				
Migrant only	505	57.4	0.00	0.00	19.0	7.7	15.8				
Non-migrant only	284	20.4	27.5	31.3	8.1	3.9	8.8				
No Children	34	11.8	0.00	0.00	55.9	26.5	5.9				

Table 5.1: The percentage of living arrangement of elderly by socio-economic and demographic characteristics (row column)

Village/Ethnicity

0.000 (0.13)

Background Characteristics	Ν				Livin	g Arrangeme	nt	
	-	Spouse Only	Daughter	Son	Alone	Relatives	Other Arrangement*	P-Value (Cramer's V)
Giriasih (Javanese)	233	24.5	25.5	24.5	5.6	7.3	12.5	
Muara (Batak)	215	22.8	9.8	29.8	18.6	7.0	12.1	
Cacaban (Sundanese)	364	44.2	14.6	13.5	12.9	3.3	11.5	
Bugoharjo (Javanese)	300	32.3	16.3	12.3	21.3	5.3	12.3	
Rejoagung (Javanese)	336	30.9	17.0	20.5	11.3	3.6	16.7	
Gunung Sarai (Balinese)	318	34.3	6.9	29.3	8.2	7.2	14.2	
Education Attainment								0.000 (0.11)
None or less than primary	649	28.0	17.6	21.7	17.1	6.2	9.4	
Primary	818	35.3	13.5	19.6	10.6	5.5	15.5	
Secondary +	229	35.5	12.7	22.7	10.0	3.3	15.7	
Socio-economic Status								0.000 (0.16)
Poor	590	25.1	18.6	25.3	8.3	6.3	16.4	
Medium	591	32.5	15.2	20.3	11.2	5.9	14.9	
Rich	585	40.5	10.6	17.1	19.3	3.9	8.6	
Disability								0.000 (0.16)
Yes	290	21.4	18.6	28.6	10.7	10.0	10.7	
No	1,476	34.9	14.1	19.4	13.4	4.5	13.8	

Note: * With spouse and others; spouse and both daughter and son and/or others; both son and daughter and/or others Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Child migration changes the household structure by increasing the number of the elderly who live alone or live only with a spouse. The elderly who live alone were mainly women, while men were more likely to live in a household with their spouse and other(s). These elderly women might be at risk and in a vulnerable situation due to lack of a carer. Men are also less likely to live with others (not spouse or children) compared to women (1.6 percent VS 8.4 percent). This reflects the feminization of the older population as a result of the higher life expectancy of women. The likelihood that women will live alone as against living with others is also a result of higher levels of widowhood and the lower rate of women's remarriage noted in earlier chapters (G. R. Andrews & Hennink, 1992; Tohme, Yount, Yassine, Shideed, & Sibai, 2011; Yount, 2005; Yount & Khadr, 2008).

Table 5.1 also describes how the pattern of living arrangements of older adults may vary across the socio-economic and demographic background. Marital status has the strongest relationship with the living arrangements of older people. The Cramer's V is used to examine the strength of a relationship. The Cramer's V (0.75) indicates that the association of marital status and living arrangements is very strong. Older persons who are currently not married (never married, separated or divorced) are more likely to live alone at just over 37 percent, compared to married older people at very small numbers – less than 1 percent. This finding confirms previous findings (for instance Kramarow, 1995; Mehio-Sibai, Beydoun, & Tohme, 2009) who found that ever-married seniors were less likely to live alone. In contrast, just below half of their married counterparts live with their spouse only. A significant number of older persons who are not currently married live with other than children and spouse at 15.3 percent. Fewer than 1 percent of married older people live with relatives. Based on this very strong relationship, in multivariate analysis the marital status will be excluded in the analysis.

The second strongest factor associated with living arrangements is the presence or absence ("childless") of children. The "childless" category refers to older persons who do not have children (including adopted children and children-in-law) and the older persons whose children had migrated. This is grouped into four sub-categories including older people who have both migrant and non-migrant children, migrant children only, non-migrant children only and no children. "Non-migrant only" refers to children who are co-residing or living at the same village with their parents. "Migrants only" refers to parents who have no children residing or living in the same village as them. Table 5.1 shows that the highest percentage of older people who have both migrant and non-migrant children are living with their son (29.6 percent), followed by living with spouse only (24 percent) and living with daughter (19.4 percent). A small proportion are living with relatives (4.6 percent). Similarly, older people who have non-migrant children only mostly live with their son (31.3 percent), followed by living with a daughter (27.5 percent) and spouse only (20.4 percent). Hence, the most common living preference among

older people is to live with a son. More than half of older people who have migrant children only are living with their spouse only, followed by living alone at 19 percent. A small number live with relatives (7.7 percent). In the multivariate analysis, the two categories of migrant children only and both migrant and non-migrant children will be collapsed into one category as no variation among migrant children only to live with their older parents. More than half older persons who do not have children are living alone. A significant portion of the sample (31.8 percent) are living with relatives.

Moreover, the composition of households clearly varies among societies. In patrilineal communities like the Balinese and Batak Toba, parents are more likely to co-reside with their son. In the patrilineal system, men dominate ownership of resources, whereas women, when they marry, join the husband's family. In contrast, in a bilateral kinship system, Sundanese and Javanese, there is no significant difference between male and female children in numbers co-residing with their elder parents. In a bilateral system, women and men are considered to be equal members of their natal families, and there is little if any preference with respect to the gender of the co-resident child.

The pattern of living arrangements also varied by socioeconomic status of the elderly. The proportion of the elderly who lived alone and with spouse only increased with increasing socio-economic status. The elderly of a wealthy family were more likely to live alone and with spouse only, compared to those of lower socio-economic status. This finding accords with Witoelar (2012) who found that older people with more human capital (and household assets) were more likely to live alone. In contrast, the likelihood of co-residing with children decreased by increasing socio-economic status. This pattern might reveal that levels of parent-child co-residence are inversely related to socioeconomic development (Asis, Domingo, Knodel, & Mehta, 1995; Bongaarts & Zimmer, 2002).

Table 5.2 shows the result of the multinominal logistic regression model predicting the choice of living with spouse only, living with daughter; living alone; living with relatives; and other arrangements as opposed to living with son. For the objectives of this chapter, living with a son is used as a reference category as living with a son is much more common than living with a daughter. Putting "living with son" as the reference category is aimed at identifying the influence of ethnicity and preferences of older people as to whom they wish to live with. The model as a whole suggests that the influence of independent variables on the living arrangement is significant (p<0.05). The result showed a significant variation of living arrangements depending on sex, ethnicity/village, presence of children, disability and social class.

Background		Living arra	ngement (V	S Living with	Son)
Characteristics	Spouse Only	Daughter	Alone	Relatives	Other Arrangement^
Male (VS Female)	1.570 ***	0.884	0.313 ***	0.208 ***	1.771 ***
Age Group (VS 60-69)					
70-79	0.967	1.004	1.997 ***	1.842 **	0.488 ***
80+	0.476 ***	1.105	1.703 **	2.102 **	0.297 ***
Non-Migrant Only VS Both Migrant and Non-Migrant	0.231 ***	1.021	0.300 ***	0.429 **	0.362 ***
Village (VS Rejoagung-Java	nese)				
Giriasih (Javanese)	1.200	1.282	0.721	2.055	0.750
Muara (Batak Toba)	0.468 ***	0.393 ***	0.872 ***	1.555	0.490 **
Cacaban (Sundanese)	3.970 ***	1.264	2.797 ***	1.984	1.525
Bugoarjo (Javanese)	2.044 ***	1.535	2.994 ***	3.018 **	1.285
Gunungsari (Balinese)	0.937	0.279 ***	0.467 **	1.606	0.706
Education Attainment (VS N	one or less th	an primary)			
Primary	1.090	0.888	0.752	1.937 **	1.426 *
Secondary +	0.881	0.881	0.624	1.219	1.432
Socio-Economic Status (VS	Poor)				
Medium	1.469 **	1.057	2.051 ***	1.172	0.936
Rich	2.464 ***	1.070	5.423 ***	0.866	0.605 **
Disability (VS None)	0.541 ***	0.834	0.469 ***	1.056	0.818

 Table 5.2: Multinominal logistic regression model: the relative risk ratios of predicting the living arrangement of older people

Note: - Significance level *** p<0.01, ** p<0.05, *, p<0.1.

 ^ With spouse and others; spouse and both daughter and son and/or others; both son and daughter and/or others

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

The relative risk ratios indicate that compared to older women, older men are significantly more likely to live with spouse only and less likely to live alone and to live with relatives compared with living with a son. Those elderly at the age of 80 and over are less likely to live with spouse only. The likelihood of living alone and living with anyone other than spouse and children increases significantly by increasing age-group. The migration status of children is also a significant predictor of older people's living arrangements. In comparison to older people who have both migrant and non-migrant, those with non-migrant children only are significantly less likely to live only with their spouse than any other living arrangement.

Ethnicity also is among the most significant predictors of living arrangements among elderly people. Ethnicity depicts a kinship system that provides the basis for household, family recruitment and sponsoring (Niehof 1995). In patrilineal communities (Batak Toba and Balinese), families maintain a strong preference for sons to continue the line of descent and they consequently pass land ownership and other valuable properties to sons. Following from this, those with a patrilineal kinship system have significantly lower relative risk ratios of living with daughters compared to living with sons. In patrilineal kinship, the daughter will follow her husband's clan and live with them. In contrast, in bilateral kinship systems, male and female children have a more equal position. These values influence the living arrangements among Sundanese and Javanese in which there is no significant difference in the prevalence of male and female children co-residing with their aged parents. Moreover, older people from patrilineal communities are significantly less likely to live alone compare to bilateral communities. By tradition, the Balinese and the Bataks are more likely to live in extended family households than the Javanese or the Sundanese.

The socio-economic status of the elderly is also significantly associated with living arrangements. Older Indonesians who have a high socio-economic status have significant higher relative risk ratios of living with spouse only and living alone than living with son. It indicates that the elderly from high income families able to pay people to do things for them such as poorer neighbours. It is a common practice in the areas of high migration of young people, the children who had migrated to cities pay neighbour to care for left behind parents as discussed in section 5.3.4 on how caring arrangement and supports operate.

5.3 Care arrangement among elderly rural Indonesians

5.3.1 What are care needs?

Caregiving is often defined as the types of tasks that are needed or performed, such as assistance with medical care or with day-to-day activities. Many studies focus on assistance with particular activities associated with the Activities of Daily Living (ADLs) and/or Instrumental Activities of Daily Living (IADLs). Thus, care refers to assistance to the older persons who have difficulties in daily living activities such as bathing, clothing, toileting, eating and walking. The concept of care needs can be extended to financial assistance, and discussion about health and family issues (Chappell, 1991). This chapter uses a broad definition of family caregiving, which includes physical care such as nursing and other hands-on care, direct services such as housework, coordination of care is then defined as an inability to perform at least one ADLs or IADLs as well as needing financial, emotional and decision-making support. The inability to bathe, dress or go shopping is indicative of specific needs.

5.3.2 Who needs care and type of care needed

Table 5.3:	The	distribution	of	older	people	who	need	assistance	across	socio-
demograph	nic gr	oups								

Background Characteristics	Self- Care	Daily Needs	Sick	Shopping	Financial Assistance	Decision Making	Emotional Support	Trans- portation
Total	16.4	63.2	85.5	29.5	65.3	67.7	77.7	71.3
Sex								
Female	18.9	55.9	84.6	30.5	73.8	69.5	76.3	83.1
Male	13.4	71.7	86.3	28.2	54.8	64.9	78.9	56.1
Age Group								
60-69	7.6	55.5	82.5	15.3	58.2	62.8	74.6	62.1
70-79	18.6	66.2	86.0	35.6	68.8	70.0	78.6	75.7
80+	42.1	80.9	93.3	64.7	81.6	76.6	83.0	90.1
Marital Status								
Married	13.2	62.1	84.5	24.5	61.5	69.5	79.6	65.7
Unmarried	22.6	63.1	85.6	38.5	72.1	62.7	72.4	80.2
Child Presence								
Migrant and Non Migrant	19.9	66.2	86.7	33.2	68.0	70.3	78.4	25.1
Migrant only	9.3	52.8	79.0	20.4	59.8	57.8	71.1	41.2
Non-Migrant	18.7	71.8	94.0	34.2	66.6	77.4	88.0	22.2
No children	8.8	38.2	67.7	17.7	52.9	29.4	38.2	35.3
Village/ethnicity								
Giriasih	28.8	78.1	91.4	37.8	75.1	82.3	86.6	15.5
Muara	15.8	59.5	76.7	34.0	69.8	45.1	58.6	41.4
Cacaban	14.0	61.8	92.0	25.8	57.4	71.4	82.7	37.4
Bugoarjo	16.7	56.9	81.3	31.3	66.0	66.3	82.0	26.5
Rejoagung	8.6	55.4	80.4	19.6	56.3	58.9	71.4	35.7
Gunung Sari	18.6	68.2	87.7	32.1	72.0	75.8	78.0	18.2
Education Attainmen	ıt							
None or less than primary	21.4	68.3	87.8	38.4	72.9	73.3	81.7	81.9
Primary	13.0	59.3	84.7	24.7	64.1	65.5	75.8	68.6
Secondary +	15.1	61.3	81.7	22.7	51.3	59.7	72.6	53.0
Socio-Economic status								
Poor	20.9	67.8	89.0	35.8	73.2	75.4	82.3	78.3
Middle	13.7	60.9	84.1	26.7	64.5	62.7	74.1	69.4
High	14.7	59.6	82.7	25.3	57.6	63.4	75.0	64.2

Bold: P Value < .05

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

To identify who needs care and the type of care needed, respondents were asked about their ability to perform self-care including dressing up; going to the toilet, bathing; cooking; eating and drinking. Older people were also asked about their perceptions of who usually provides different types of care and/or assistance in their lives, including support for daily routine in the home, financial support, care when sick, transportation support, support for making important decisions, and emotional support. Table 5.3 describes the prevalence of older people who need assistance and support in performing daily activities across sociodemographic groups.

Table 5.3 demonstrates eight types of support explored in the survey including selfcare, household chores, shopping, having a carer when sick, financial assistance, decision making, emotional support and transportation. Table 5.3 describes a high need for care among the elderly in rural Indonesia across all types of care, except the category of those who need personal care, at 12.5 percent. Besides self-care and shopping, more than 60 percent of older persons need help and support in household chores, care when sick, financial assistance, decision making, emotional support and transportation. The high percentage of older persons who need care is a crucial issue as D. R. Phillips (2002) has stated that the care of older people is one of the most severe problems arising from population ageing in the Asia-Pacific region.

The lower self-care need than other type of care need is caused by the type of questions posed to respondents. For self-care needs, older persons were asked about their ability to perform self-care, what tasks they found difficult or impossible to perform, and thus needed help to cope with. The other type of care needed were directly asked their perceptions of who usually provides care or assistance when they are sick, need help for transportation, financial difficulties, emotional support and for shopping.

Table 5.3 also reveals that the type and level of needed care and support varies by gender, marital status, ethnicity, presence of children, age group and social class. The table shows that those who need more care are women, unmarried women (never married, divorced, widow or widower), higher age, having non-migrant children only and belonging to a lower social class measured by income and education attainment (low income family and elderly with none or less than primary education attainment). Those groups can be categorised as vulnerable if they receive inadequate help and support. Van Eeuwijk (2006: 74) insisted that "old age vulnerability" refers to the threat of negative outcomes which include the failure to provide adequate care and support. The proportion of women who need assistance is significantly higher in all types of care except in domestic chores (daily needs). In the domestic chores, older women are often the primary carer for their husband or their family.

The proportion of women who needed assistance in self-care was significantly higher at 18.9 percent than men at 13.4 percent. In contrast, a much higher share of men (71.7 percent) than women (55.9 percent) reported needing assistance in daily activities (The term "daily activities" refers to domestic tasks). This reflects the conventional division of work among elderly men and women in the family. Women are often responsible for domestic tasks and therefore a higher percentage of elderly men reported needing assistance this area. Moreover, elderly women were also more likely to report needing financial assistance, decision making help and transportation support at 73.8 percent, 69.5 percent and just over 81 percent respectively compared to male elderly. It reflects that the majority of the participants in the negotiation of care are women or women are more in need of care than men.

This finding confirms previous research maintaining that more older women than older men need long-term care and support (D. R. Phillips & Chan, 2002). Based on this, women are more vulnerable to inadequate care than men, particularly in patrilineal kinship societies in which they have limited power in negotiating arrangements for their support. A local leader in Muara stated that women are very powerless in Batak society: "ga ada artinya perempuan bagi orang batak disini" (Muara, Male, 07/09/16, M125ML). The local leader maintained that after marriage, women live with their husband's family and change their clan name to their husband's clan (*ikut marga suami*). Similarly, the head of the Silali Toruan Village argued that the women in Batak society lack strong authority in managing the family, unlike those in Java. He said that men have the largest power in managing the family (Muara, 16/3/2017; M49TT).

Moreover, increasing age meant an enhanced risk of inadequate care, as the need for care increased. For instance, the percentage of older persons at the age of 60 and 69 years old who needed assistance in personal care was 7.6 percent and this increased significantly to 18.6 percent at the age of 70 to 79 years old and to just over 42 percent at the age of 80 and over. The need for daily care also increased significantly from 55 .5 percent at the age of 60-69 years to just below 81 percent at the age of 80 and over.

Unmarried older persons, particularly the never married, were also vulnerable to inadequate care because they lacked a spouse, children, children-in-law and grandchildren to provide for them. A higher proportion of unmarried senior citizens reported needing help for personal care (22.6 percent), daily needs (just over 63 percent), during sickness (85.6 percent), shopping (38.5 percent), financial assistance (72.1 percent), and transportation (80.2 percent) than married older persons.

Differences by social class status measured by education attainment and household income are also noted. The elderly who had no education or less than primary education and the elderly from low-income families were vulnerable to inadequate care and support, in part because they had limited financial resources and material assets. Table 5.3 also illustrates that the need of care reduced significantly in step with increasing educational attainment and higher socio-economic status in all care categories, or in other words older persons of high social class were more independent than older persons from the lower classes. For instance, the need of personal assistance dropped significantly from 21.4 percent for the older person of low education to just over 15 percent for those who completed secondary and tertiary

education. Those from the least privileged socio-economic backgrounds demonstrated higher levels of difficulties with key activities of daily living (just below 21 percent).

5.3.3 Who provides care for disabled older people?

The main cause of care dependence in older age is loss of functioning or disability, resulting from chronic disease and age-associated impairments (Stuck et al., 1999). Loss of ability in performing ADLs indicates the need for more intensive care. Australia Indonesia Partnership for Economic Governance (2017) reports that disability was concentrated among older people in Indonesia. Based on Susenas-Survei Sosial Ekonomi Nasional (The National Socioeconomic Survey) 2012 data, it was reported that around 26% of older persons were affected by a disability which was much higher compared to the younger population, such as the population aged between 0 and 14 at 1.9 percent and those between 15 and 29 at 1 percent (Cameron & Suarez, 2017). The 2016 ARIS data also shows a relatively lower percentage of older persons who have a disability and its prevalence increases by increasing age. Among 1,765 respondents surveyed in 2016, just over 16 percent of the elderly have a functional disability, and 67.5 percent of older adults suffered from one or more chronic diseases such as high blood pressure, arthritis and gout (a detailed explanation is given in Chapter 3). The survey also reported that around 85.3 percent of the elderly needed caregiving during sickness. Illness and functional disability for older people leads to dependence on others and the family is often the primary resource for caregiving. The elderly with a disability often need long term care. Table 5.4 describes the prevalence of older people who need assistance and support in performing daily living activities and their carer.

Table 5.4 illustrates that the majority of help and care for the disabled elderly is provided by close female family members, most often the wife and daughter. This finding confirms previous research on caring in North Sulawesi where most older people rely on close family members, most often a wife or a daughter (or both), to provide treatment, care and support (Van Eeuwijk, 2006). It indicates that caring for the elderly involves reciprocity and competence. Caring is often associated with women's competence. From the qualitative interviews, it is often mentioned that older people choose (particularly in Javanese culture) one of their children (mainly a daughter) to take care of them based on their reciprocity. Sono who is a religious leader, 66 years old, stated:

The majority of carers here are daughters. The most important thing is the daughter and the majority choice is the closest one...and then the chosen care provider is the person who is able to care everyday which is a daughter. I gave an opportunity to my son to take care of me, but I was unsatisfied. Therefore, I choose my daughter even though my daughter is not living with me as she lives with her husband...she can take care of me every morning and evening (Giriasih, 20/01/2017, M2GKS).

The case of Sono illustrates that caring consists of responsibility and competence. A daughter is seen as the closest family member competent to provide daily care for the elderly. Daughters were described having greater competence in caring as women are often described naturally nurturing while men are said to be naturally aggressive (Kandal, 1988). Tronto (1993) summarises four ethical elements needing to be integrated in a good carer, including attentiveness, responsibility, competence and responsiveness, all of which need to be present and integrated if good care is to eventuate. Sono, who was cared for by his son and daughter in-law, felt uncomfortable in such circumstances and expressed preference for a daughter's care, thus reflecting a common underlying feeling of many in the older generation of Javanese.

The bolded number in Table 5.4 indicates the highest percentage of primary carer types for each indicator of disability. Among family members, women, particularly a wife and daughter, are located centrally as the providers of care and support. The wife becomes the main carer in four activities including helping the elderly spouse with toileting; putting on clothes; getting up from the bed, and walking across the room, while the daughter becomes the preferred carer in helping elderly parents in eating and drinking; bathing and standing up after sitting down. The dominant role of daughter and wife and to some extent daughter in-law shows the strongly gendered nature of caring. It also indicates that caring is still a key gender issue. J. E. Phillips et al. (2010) insisted that women play the major role in both formal and informal care. The role of older women in caring is often called unpaid care. Older women continue to do more than twice the amount of unpaid care as men. Social norms maintain that care is seen as women's work, even in older age (Horstead & Bluestone, 2018).

In addition to providing unpaid care to husband and other family members, older women also often provide community care or assistance to community members. It is common for an older woman to participate in community events such as marriage and other traditional ceremonies, and also common for older women to participate in preparing food in community events. The case of Ita, who is 65 years old describes the role of an older woman in providing care for family members and community. Ita is living with her husband who suffered a stroke two years before. She is the only care provider for her husband. She works as a seasonal worker in the rice field on other people's farms as she and her husband do not own land. She is the breadwinner after her husband suffered his stroke as they are childless. Besides providing care for her husband, Ita actively engages in community events, including usually preparing food for community ceremonies.

ADLs Difficulties	Ν	%	Wife	Husband	Daughter	Son	Daughter	Male	Female	Others
							in-Law	Relatives	Relatives	
Eating and drinking	171	9.5	12.7	7.5	25.4	17.9	13.3	5.8	15.6	1.7
Putting on clothes	110	6.1	24.6	11.8	18.2	8.2	18.2	2.7	14.6	1.8
Toileting	100	5.5	20.6	11.8	17.7	10.8	17.7	3.9	15.7	2.0
Bathing	102	5.7	21.4	8.7	23.3	9.7	16.5	2.9	14.6	2.9
Getting up from the bed	138	7.7	21.0	16.7	17.4	8.7	18.1	4.4	11.6	2.2
Walking across the room	138	7.7	21.7	12.3	20.3	6.5	18.8	5.1	13.0	2.2
Standing up after sitting down	181	10	18.8	12.2	21.6	10.5	17.1	3.9	12.2	3.9
One or more ADLs	290	16.4	18.4	9.5	26.2	11.2	14.0	5.4	11.9	3.4

Table 5.4: The percentage of older persons who need assistance by disability indicators and care providers (N: 270)

Bold: The highest percentage Source: Calculated from 2016 Ageing in Rural Indonesia Survey

A woman leader in her village stated that the local community was happy with her cooking, and therefore she always participated in these events (Cacaban, 18/02/2017, F22SI). It is common in rural areas that the older women lead food preparation in public events as they are expert in making traditional foods. In Javanese culture, it is also common for women to provide assistance for community members, and this activity is called *"rewang"* (cooperative cooking). *Rewang* is a part of reciprocal labour done by rural women to help cook for family rituals or ceremonies (Asmussen, 2004; Chao, 2017; Sullivan, 1994). In *rewang*, the women usually involve close neighbours and members of the extended family (Asmussen 2004).

Table 5.4 also shows that the more intimate the activity of daily living such as defecating and bathing, the less frequently elderly people allowed family members to assist with the task. Defecating and bathing are among the lowest percentage category where older people would seek help. Van Eeuwijk (2006) maintain that "*adat*" (social norm) causes strong gendered perceptions about proper behaviour, physical proximity and interactions that in turn influence which activities people prefer to perform independently. Based on these social norms, older people try to maintain the ability to carry out those personal activities on their own.

The elderly with difficulties in performing one or more those activities can be categorized as having disabilities. The care providers for the elderly who suffer from functional disabilities are mostly women, and in those cases the daughter was reported as the main carer at just over 26.2 percent, followed by the wife at just over 18 percent, daughter in-law at 14 percent and female relatives at just below 12 percent. Table 5.3 and 5.4 show that women are more in need of care and at the same time become providers of care for elderly husbands or fathers, or in other words both care recipients and care providers are often elderly women.

To analyse the different pattern of who provides care, it is important to analyse who is providing care based on the socio-demographic characteristic of the older persons. Table 5.5 (p.137-138) shows the caring provider by the socio-demographic characteristic of the subjects. Table 5.5 describes a number of distinctions between different types of carers by sex, age group, ethnicity/kinship system, living arrangements, presence of children and social class. The first is that elderly men are more likely to name their wife as caregivers (just over 53 percent) than are elderly women to name their husband (16 percent). Elderly women are more likely to report a daughter as a care provider (32 percent). The likelihood that elderly women will become primary caregivers to husbands is in part caused by the cultural values and even "piety" of the women. Wunderink and Niehoff (1997) found that besides economic factors, cultural and sociological aspects were essential in influencing the division of labour in the household. It is thought to be part of women's obligations to take care of their husbands, and when older women need assistance, the obligation of caring is transferred to children, particularly daughters.

This different responsibility in household activities by sex is known as the division of labour in the household. The division of labour between men and women is often socially constructed. Mason (1995) argued that this social construction defined roles of women and men; divisions of labour between them; responsibilities; obligations; rights and social sanctions. These constructions often placed women as having greater burdens in dealing with pregnancy, childbirth, childcare and childrearing, domestic chores and providing care for the family, extended family and society.

In addition to cultural factors, the likelihood of elderly women being care providers for their husbands arises also from the differential life expectancy between men and women in which women are more likely to live longer than men. Table 5.5 (p.137-138) describes the significant drop in numbers of elderly men who provide care for their disabled wife. The percentage of older men at the age of 60 and 69 who provide care is 18.6 percent, declining substantially to 12.2 percent at the age 70 and 79 and to 3.6 percent at the age of 80 years and over. In contrast, elderly women show a steadier decline in the corresponding figures.

The second point is that daughters in-law are often reported as the main care provider for the disabled elderly in patrilineal communities (Muara and Gunung Sari), and those parents who co-reside with their son, while the daughter is often named as the main carer in bilateral communities (Giriasih, Cacaban, Bugoharjo and Rejoagung) and for those parents who coreside with their daughter. Traditionally in patriarchal communities particularly Batak Toba (Muara) and Balinese (Gunung Sari), responsibility for caring for older parents falls on the youngest son, and in particular on the daughter in-law, through co-residence.

This finding confirms Gubhaju et al's finding (2019) on the importance of culture (matrilineal and patrilineal values) in determining who provides care for an elderly parent – whether it is led by daughters, sons or daughters-in-law. Similarly, J. E. Phillips et al. (2010) maintains that the practice of providing care has been seen to be varied in relation to ethnic groups. Compared with older people from a bilateral kinship system, the elderly who are from a patrilineal kinship system are significantly less likely to receive assistance from a daughter. The role of husband is also very significant in patrilineal communities. Twenty-one percent of older women in Gunung Sari, for instance, named their husband as their primary care giver, which is much higher than the figures for daughters and other female relatives. In contrast, in bilateral kinship societies, the role of the husband seems very limited as the percentage of elderly men as care providers is the lowest in those groups. In Giriasih, for instance, only 3.5 percent of older women named their husband as their primary care giver, which was the second lowest after the "cared by others" category.

The higher participation of male family members in providing care in the patrilineal kinship context is partly caused by cultural values. In these communities, the daughter follows and belongs to the husband's clan after marriage. As a consequence, the role of the daughter

in providing care is then transferred to the parents-in-law. A strong male family members' role in taking care of the sick in a patrilineal system can be seen in the case study of Opung (80 years old). He is a retired school headmaster. He has two daughters and two sons. All of them migrated to cities and had good jobs as government officials and in private companies. He lives with his sick wife (84), and he is her only care provider. He stated:

My wife is sick, I must cook, clean the house, do the laundry, after that I go to my farm at around 9 am...my wife is very weak, she suffers from old people's sickness (sakit tua), she suffers from gastric pain as well, so that is why I have to watch her diet. Only two of us live in this house, when I go out, my wife says please get home early, do not get home late at night. She can walk only around the house. For bathing, I help her with bathing. She can eat by herself. Every morning, she drinks milk, I provide bread for her breakfast. I go to my farm from 9 am to 12 noon. Every week she has to go to the doctor. Every week, on Thursday, I accompany her to a community health center (Puskesmas), using public transport. (Muara, 15/03/2017, M32LJ).

As primary caregiver, Opung at his age is taking care of his wife including preparing food, bathing her and accompanying her to the doctor. Occasionally, his children in Medan or in Jakarta pick up their elderly mother for better medical treatment in the city. The strong role of male family members in providing care for the elderly in a patrilineal kinship system can also be seen by the network of care providers during sickness (Figures 5.1 & 5.2).



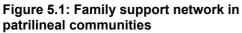


Figure 5.2: Family support network in bilateral communities

Figures 5.1 and 5.2 compare the network of support systems between bilateral and patrilineal kinship systems. The circle in the figures shows the distribution of care providers from the highest percentage at the top (spouse) to the smallest percentage based on the

clockwise direction. In patrilineal kinship systems, the primary carer likelihood descends progressively from spouse to son, daughter-in-law, daughter, male relatives, female relatives, granddaughter, grandson, brother, others and finally to son-in-law. The corresponding figures for the bilateral kinship system descend from spouse, daughter, son, daughter-in-law, female relatives, neighbour, granddaughter, sister, grandson, male relatives, son-in-law, brother, other and finally nephew. Figure 5.2 shows that bilateral kinship offers a wider support network by putting equal responsibility on men and women from both the father's and the mother's lineage while in patrilineal kinship systems the care provider mostly arises from the male lineage. The role of the son in-law is much less frequent and the sister to some extent is scarcely recognized as a caregiver in the patrilineal system.

Moreover, in a patrilineal kinship system, the percentages of male family members as primary caregivers is generally higher than female family members. For instance, male relatives have a higher percentage at 2.4 percent in providing care compared to a female relative at 1.8 percent. In contrast, the percentage of elderly female members who provide care is higher in the bilateral kinship system. Sisters and brothers also contribute as primary carers in the bilateral system, though less frequently. However, sisters in the patrilineal kinship system are scarcely recognized.

The third is that living arrangements are also a crucial factor influencing the identity of caregivers. Table 5.5 (p.137-138) demonstrates that when it comes to caregiving, living with someone is more important than the relationships of the subject to an individual. For instance, those living with relatives (not spouse and children) and those living alone are more likely to receive assistance from female relatives than from a daughter or a son. In contrast, older people are significantly more likely to receive support from a daughter-in-law if the older person co-resides with their son, while they receive more support from a daughter if they co-reside with her. A daughter (34.6 percent) and a daughter-in-law (19.2 percent) are most likely to be named as primary caregivers by older people living alone, and there is no support from a son. Table 5.5 (p 137-138) also shows the limited role of sons and daughters-in-law for older people living with their daughter. It indicates that the role of carer mostly relies on the daughter. The elderly who are living with relatives (not spouse and children) are more likely to receive care from female relatives (50 percent) than male relatives (3.6 percent). The elderly who are living with spouse only reported that they support each other equally (36.2 percent).

Background	Care Provider											
Characteristics	Wife	Husband	Daughter	Son	Daughter in-Law	Male Relatives	Female relatives	Others	P -value (Cramer's-V)			
Sex									0.000 (0.67)			
Female	0.0	16.0	32.0	10.3	17.7	5.7	14.3	4.0				
Male	53.1	0.0	17.7	12.5	7.3	3.1	5.2	1.0				
Age Group									0.146 (0.19)			
60-69	21.4	18.6	24.3	12.9	8.6	4.3	8.6	1.4				
70-79	20.0	12.2	25.6	11.1	10.0	5.6	11.1	4.4				
80+	16.2	3.6	29.7	9.9	20.7	4.5	12.6	2.7				
Child Presence									0.000 (0.67)			
Both migrant and non-migrant	18.6	8.1	27.3	12.8	16.9	4.7	9.9	1.7				
Migrant only	31.8	25.0	2.3	4.6	4.6	4.6	20.5	6.8				
Non-migrant only	9.8	3.9	49.0	11.8	13.7	5.9	3.9	2.0				
No children	0.0	0.0	0.0	0.0	0.0	0.0	66.7	33.3				
Living arrangement									0.000 (0.46)			
Spouse only	36.2	36.2	8.6	6.9	1.7	5.2	3.5	1.7				
Daughter	13.7	0.0	76.5	0.0	0.0	5.9	3.9	0.0				
Son	18.0	3.9	11.5	24.4	33.3	3.9	5.1	0.0				
Alone	0.0	0.0	34.6	0.0	19.2	7.7	15.4	23.1				
Relatives	0.0	0.0	10.7	17.9	14.3	3.6	50.0	3.6				
Other arrangement	31.0	10.3	27.6	6.9	6.9	3.5	13.8	0.0				
Village/Ethnicity									0.005 (0.26)			
Giriasih	5.2	3.5	32.8	25.9	10.3	10.3	10.3	1.7				
Muara	13.3	10.0	23.3	3.3	23.3	6.7	20.0	0.0				
Cacaban	21.6	9.8	41.2	3.9	3.9	3.9	9.8	5.9				
Bugoharjo	19.6	4.4	37.0	4.4	6.5	2.2	17.4	8.7				
Rejoagung	37.9	10.3	17.2	10.3	20.7	0.0	3.5	0.0				

Table 5.5: The care provider of disabled older persons by socio-demographic characteristics (N: 270)

Gunung Sari	23.2	21.4	7.1	12.5	25.0	3.6	7.1	0.0	
Education Attainmer	nt								0.005 (0.24)
None or less than primary	11.0	7.1	33.1	10.2	14.2	3.9	15.0	5.5	
Primary	25.5	15.7	25.5	9.8	10.8	3.9	7.8	1.0	
Secondary +	26.2	7.1	11.9	16.7	21.4	9.5	7.1	0.0	
Socio-Economic stat	tus								0.032 (0.21)
Low	13.7	7.7	29.9	14.5	12.0	6.8	13.7	1.7	
Middle	16.5	7.6	32.9	10.1	13.9	3.8	11.4	3.8	
High	29.3	17.3	16.0	6.7	17.3	2.7	6.7	4.0	

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Shanas (1973) argued that in order for children and relatives to function as a source of caregiving for older persons, they must be physically close and often meet with those older people. Proximity is one of the main determinants of the type of support that can be provided to elderly people (Chappell, 1991). Kivett (1985) argued that proximity to kin is a common denominator of support across all kin levels. Based on this, I would argue that care providers to elderly people differ depending on the living arrangement of the older person. The qualitative interview also pointed to the importance of co-residence with children as the main source of caregiving. For instance, the local leader of Giriasih insisted that proximity and co-residence were the main determinants of caregiving. If the co-residing children could not help, the elderly then sought assistance from other children if they had more than one child. So, co-resident children were the first choice as care providers (Giriasih, 27/12/2016, M1GKT). Rajan and Kumar (2003) pointed out that in the absence of a well-developed system for providing social services to the elderly, they had to rely on persons living in close proximity. Thus, the living arrangement becomes an essential constituent of the overall well-being of the elderly and provides some indication of the level of actual support available to them.

The fourth factor is the presence of children. Table 5.5 (p 137-138) describes that the elderly with no children reported female family members as primary care givers at just below 66.7 percent and others at 33.3 percent. Those who have migrant children normally rely on spouse and female relatives as primary care givers, while those with non-migrant children rely mostly on a daughter or daughter-in-law as primary care giver. The role of spouse is relatively limited for older people with non-migrant children only. Reflecting the practice in the community where the role of spouse is decreasing, older parents often ask their children to return home to take care of them.

The last category is socio-economic status. Elderly women from a relatively rich family were more likely to report husbands as primary caregivers compared with women from medium and lower income households. This pattern is in line with the tendency of living arrangements in which, as socio-economic status rises, the elderly are more likely to live with a spouse only. The role of children (both daughter and son) is decreasing as socioeconomic status increases. This pattern is also corresponding to living arrangements where children are less likely to correside with their parents with higher socio-economic status.

5.3.4 How caring arrangements and supports operate

5.3.4.1 Through participation of multiple family members

Armstrong and Kits (2004, p. 45) argue that 'caregiving is not a simple act but rather a complex social relationship—one embedded in personal histories and located within specific conditions'. Caring and support of elderly parents often involve multiple members within a family. Such a case is that of Agung, a disabled 80-year-old Balinese man, whose caring and

support involves multiple family members. Agung lives with his wife (76 years), son (43 years), daughter-in-law (38 years) and three grandchildren. Agung's wife also has difficulties with one or more daily living activities. However, she is able to assist her husband with bathing, walking and standing while his son assisted with paying bills and banking. His daughter-in-law often assisted with defecating, clothing, preparing food, and cleaning the house while his grandson often assisted him in shopping and transportation (Figure 5.3). The daughter-in-law also assisted her mother-in-law with defecating, clothing, preparing food and shopping.

Similarly, Atun, a Javanese woman of 93 years who suffers from difficulties in daily activities receives assistance from multiple family members. She lives with her son (63 years), daughter-in-law (60 years), daughter (36 years), son-in-law (38 years) and two grandchildren. She was assisted by her son-in-law with transportation and banking while her daughter assisted her with paying bills, preparing food and shopping. Other activities are mostly assisted by her daughter-in-law including bathing, walking, standing from sitting and getting up from bed, defecating, clothing, eating and drinking (Figure 5.4).

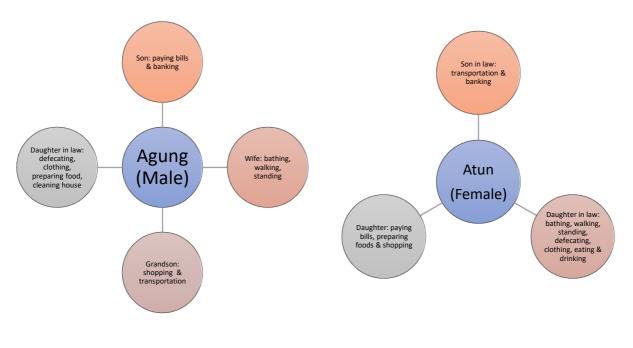


Figure 5.3: A case of Agung describing participation of family members in care giving

Figure 5.4: A case of Atun describing participation of family members in care giving

The two cases above provide an example of men and women within the family all contributing in the context of family caregiving. They show how family members both men and women organize care to an elderly disabled family member. The case of Agung also describes how a frail elderly wife can still contribute to caregiving. Agung's wife is 76 and she too has difficulties in performing daily activities. The two cases also illustrate that male family members

are more likely to have a responsibility to support an older person's activities outside the house such as transportation and financial activities, while women are mostly responsible for assisting with inside the house activities particularly for personal-care (bathing, defecating and clothing). This finding strengthen the finding in Australian context as explored by Baxter (1993 & 1998) as cited by Gray (2000) who maintains that the household labour is divided into "indoor" and "outdoor" activities where women are mostly responsible for indoor activities such as doing the laundry and cooking meals while men are mostly responsible for outdoor activities such as taking out the garbage and mowing the lawn.

5.3.4.2 Support system from family, communities and government

The support system for older persons in rural areas ranges through tier of care and support from habitual care from family and kin, small scale paid care for neighbours and children, community care and institutional care. Figure 5.5 describes the support system network and levels of caregiving.

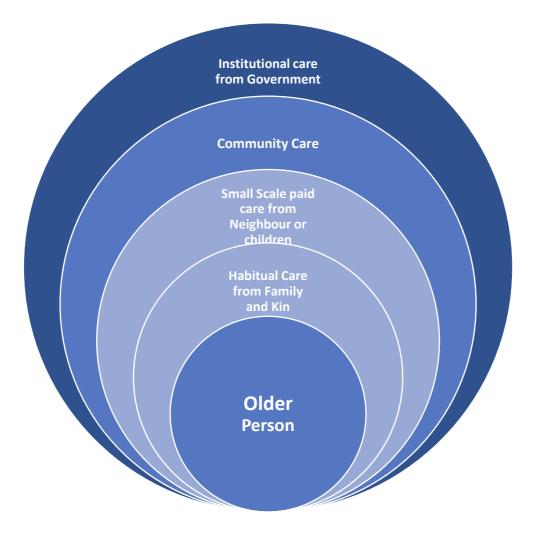


Figure 5.5: Support system network for older persons in rural Indonesia

The first tier is habitual or customary care from family or kin. The family is the traditional social institution for the support and care of the elderly. The family is the first layer of the social security system that guarantees basic care for the elderly. The body of literature on these matters usually maintains that care from family members is often described as "informal care". However, I would argue that caring for the elderly by family members, especially children and grandchildren might be called "habitual or customary care" as it is rooted in social norms. Caring for older people by family members has been a practice and become a habit in rural Indonesia. Social norms in the community influence habits. The norm shapes who provides care to the elderly and is manifested in the form of the roles adopted and the division of tasks within a family. The social norms provide rules and obligations for the family particularly spouse and children as the main provider of care to the elderly or relatives in need. The social norms of obligation are associated with filial piety, kinship responsibility and respect towards older family members (Eeuwijk, 2003). This care arrangement becomes a custom as it is practised down the ages between generations. This chapter argues that this practice of caring is habitual or customary care.

The second category is small-scale paid care to children or neighbours. This type of caring occurs when all adult children have migrated to urban areas causing limited availability of carers for the parents. In this situation, the migrated children pay the parents' neighbours or someone who lives in the village to take care of the parents. The practice of paying someone who lives near the older people is a common practice as stated for instance by the village head of Bugoharjo:

The neighbour assists the old people when she/he is sick and provided them with food. Some neighbours are paid as carers. The older people here do not want to stay with their children in the city. It is difficult to adapt to the city environment, and they do not have friends there. Therefore, many children ask their neighbour to take care of their parents (Bugoharjo, 4/2/2017, M76TM)

Similarly, a religious leader in Bugoharjo also emphasised the practice of paying neighbours to take care of left behind parents.

If the older persons are sick while their children or grandchildren are not living nearby, the neighbour takes care of them and stays during the night with them. Some neighbours are paid to cook, etc. (Bugoharjo, 5/2/2017, M65TM).

A local leader in Giriasih also noted the changing caring practices through making payments to neighbours as a result of child migration.

The practice of caring between the past and now is changing. Now, only one or two children stay at home while the others have migrated, now if the children cannot take care of their parents, the children pay someone to do so (Giriasih, 17/01/201745TM).

The narratives above illustrate that the migrant children paid the parent's neighbour or neighbours to provide care for their elderly parents. Adult children who are working and cannot return home to accompany their parents ask the neighbour or other villagers to look after their parents. The paid neighbour is responsible for cooking and looking after the elderly particularly when they are ill. The children will return home to visit their parents regularly once a year during Christmas or *Lebaran*. They also return home to care for their parents when their parents have a serious health problem. After their parents recover, they return to the city to continue working. In some cases, when the elderly parents need intensive medical treatment, the children bring their parents to stay with them in the city for better access to medical treatment (Muara, 17/03/2017, M99TM).

In some cases, when the neighbour could not provide intensive care and the parent did not want to co-reside with one of his/her children in the city, all the adult children discussed the matter and appointed one of their number to return home to take care of the parents. All of the needs of the returned child including replacing his/her income in the city would be provided by the other children (Bugoharjo, 6/02/2017, M54TM). It is often the case that the children migrated to cities due to limited job opportunities in the village. Many of them work in informal sectors in the city such as food street seller and or construction. When they return home, they can have difficulty in finding paid occupation and are thus left without income while caring for their parents. To fulfil the needs of caring and income for the returning child, siblings who are not returning home, may provide financial support not only for the parents but also for the returning child to compensate any loss of income. This practice shows the filial obligations of the children are met through adaptation rather than traditional practices. Another practice of the adaptation is where migrant children send remittances and gifts (Booth, 2017).

The third category is community care. This type of caring operates when for one reason or another family support for elderly parents is lacking. Geest argued that care is a 'process that sustains life' and represents 'the moral quality of life' (2002: 8). Thus, a community that claims to have a moral standard has the obligation to provide sufficient care for its members. Community care is part of community responsibility to help needy senior citizens (Van Eeuwijk, 2006). Older people are a disadvantaged group particularly when suffering economic hardships and lacking carers. According to a local leader, the most disadvantaged older people are those who never married and those with no children. The local term used to describe this type of elderly person is "*sebatangkara*". A few elderly people who never married live alone and suffer from psychological problems (Giriasih, 17/01/201745TM).

In the absence of children and family, the community provides care to the elderly. Support provided by the community includes care when they are sick, financial support during the sickness, emotional support (usually from a religious leader), home repair and help with daily needs such as food and paying electricity and other bills. A case study of Ida, an elderly woman of around 60, illustrates the participation of communities in caregiving. Ida lives alone, and she was never married. Her closest family is her nephew who lives in the same village, but in different sub-village. Community concern at her situation leads it to contribute to Ida's support. The head of Giriasih village, for instance, provides monthly basic food, mainly rice and pays her electricity bill. Another neighbour also contributes rice and other basic foods (Giriasih, 17/01/201745TM).

The case of Ida describes the practice of community care to disadvantaged elderly people who lack any care provider due to being single and thus having no children. Culturally, in the village context, it is a norm to share food with a neighbour, particularly the needy. Sharing a portion of food in rural context is often called as "ngirimi makanan" (sending food). It is a norm in the local context for villagers to cook extra food and share it with neighbours particularly the needy ones. This model of community caring is part of a moral obligation. Social cohesion among the older village generation is also very strong. Financial assistance from community members during sickness is a good example of this cohesion. It is also a social norm to visit sick community members, bring some nutritious food and even provide financial support. It is shameful for community members including the elderly if they do not bring food or money while visiting old or sick fellow-villagers. This practice of financial support is called "nyumbang" ("contribute"). Nyumbang is one element of social security practised for the elderly in rural Indonesia. *Nyumbang* in the rural Indonesian context has become an obligation for the household to help other families during major events like weddings, births, circumcision, etc. The tradition of *nyumbang* is usually conducted by donating some goods or money to the household holding an event as a symbol of social solidarity and exchange. The main goal of nyumbang activity is to help to reduce the burdens of other people, and it has become an essential value for rural people (Kutanegara, 2002; Lestari, 2014). Another element of social security in support of the elderly at the community level is religious charity operations. Some activities to support older persons, mainly to meet financial and emotional needs, include such customs as *zakat, sedekah* (in Islam), alms giving, counselling (in Christianity) and religious activities.

The role of child migrant organizations (*paguyuban*) is also essential to support the needs of left behind parents. The *paguyuban* often collects funds from migrated adult children and sends it to needy people, often including senior persons in their village. Besides sending money for social purposes, every year most of the migrated children return home during *lebaran* (the Muslim led celebration) and share their success through charity activities. They distribute some amount of money to their relatives, neighbours and needy people. This kind of charity is very important for poor elderly people to cover their daily needs as stated by Sari, a poor elderly 70-year-old woman who lives alone:

The migrated people who return home during lebaran usually give charity (zakat), one person gave fifty thousand rupiah (around \$5). All the charity I collected and used for my daily needs. I also received zakat in form of rice from the mosque (Bugoharjo, 6/02/2017, F38LJ).

The case of Sari demonstrates how charity activities (*zakat and sedekah*) become a source of financial support and food supply for the poor. *Sedekah* means voluntary alms giving, and *zakat* is obligatory almsgiving in the form of a contribution of the proportion of one's wealth for the use of the poor as sanctification for the remainder of the property (Metwally, 1986). Technically, it could be defined as a transfer of wealth to the needy for the purpose of the redistribution of wealth and income in society (Kahf, 1999). This activity is part of community care and the social security system among people in the communities.

The last category is institutional care for needy senior citizens from government programs. Five main programs are used to care for and support older persons in Indonesia including home care, the Conditional Cash Transfer Program (*PKH Lansia*), Social Assistance for Elderly (*Aslut*), pensions and aged care (the detailed design of institutional care will be elaborated in Chapter 7). Firstly, the home care program is a caring program at the home. A social worker provides regular visits to identify the physical needs of the elderly and provide support to the client and his or her family in providing care for the elderly. The purpose of the program is to empower the family in providing caregiving to the elderly. Secondly, the Conditional Cash Transfer Program for the elderly (*PKH Lansia*) and Social Assistance for Elderly (*Aslut*) programs provide cash transfers to older persons who are living in poverty in order to meet their basic consumption needs and to maintain their wellbeing.

Those three programs are social assistance on a home basis. It indicates the focus of government program in providing care is the home. Social ministerial regulation no 05/2018 on the national standard of social rehabilitation of older people also regulates the care of the elderly in their homes as the main approach, while the transfer of old people to a nursing home is seen as a last resort. Home base caring is often considered as a strategic approach due to their clients' attachment to their house, and is considered less expensive than institutional care. Home usually has significant meaning for older persons as a place of shared memories as well as providing some independence and autonomy. Therefore, many older people prefer staying in their home rather than moving to their children's houses or elsewhere. These older generation members are often described in the literature as "ageing in place". J. E. Phillips et al. (2010) for instance, describes ageing in place as remaining in one's home for as long as possible. Ageing in place has a significant association with well-being and quality of life. The advantages of ageing in place are that older people may have lived in the same place all their lives and prefer to remain within their community. Another benefit is a continuity in the sense

of privacy, control of one's own home, autonomy and independence. J. E. Phillips et al. (2010) maintain that home care requires the commitment of women as carer within the family to provide care. Fourthly, a formal pension is provided to retired government officials and retired workers from commercial firms. Lastly, aged care is a nursing home program provided for independent poor older persons. Independent older persons are the elderly who can perform daily activities without difficulty (Yogyakarta, 8/10/2015, M92GKP).

5.3.5 Who are excluded from their children's support?

Support from children is very important for the well-being of older people. When they lack such support, they might be categorized as neglected older people. Neglect is a condition that may cause depression and other psychological distress (Agunbiade & Akinyemi, 2017). Generally, neglect is often defined as an omission or abandonment, not doing something, withholding goods or services because of ignorance by caregivers (Council, 2003; M. J. Quinn & Tomita, 1997). M. J. Quinn and Tomita (1997, p. 48) define neglect as "the failure of caregivers to resolve a significant need of the elder despite an awareness of available resources". Similarly, the Ministry of Social Affairs defines neglected older persons as older persons who are not cared for by their family (Surabaya, 28/02/2017, M131SD).

Older people who are excluded from their children's support includes those parents whose children cannot support them either practically, emotionally or financially. The first category is general assistance. The Aging in Rural Indonesia Study asked older persons about the possibility of seeking general assistance from their children either when they were sick, doing domestic work, shopping, paying bills or any other assistance. The second is financial support. Older people were also asked if they needed financial assistance, was it possible to seek financial help from their children. The third is emotional support. Older people were asked if they needed advice or emotional support, and whether it was possible to ask assistance from their children. There are three options for the answer including very possible, possible and not possible. "Very possible" and "possible" were collapsed into one group and coded as zero. The children who might not help their elderly parents ("not possible") were coded as one and it was assumed that the parents were excluded from their children's support. The older people who had no children were excluded from the analysis.

Table 5.6 describes the percentage of older people who were excluded from having support from children by type of exclusion. Just over twelve percent of older people reported inability to seek practical help from their children. Just below 14 percent reported that they could not seek financial assistance and 10.8 percent might be excluded from emotional support. A smaller proportion of older people (7.6 percent) was excluded from having any support from their children. The percentage of neglected older people is relatively similar to

the national level. The Ministry of Social Affairs reported that 15.8 percent of older people in Indonesia were neglected in 2010 (Sunusi, 2014).

Type of child exclusion	S	All	
	Female	Male	_
Practical support	11.7	12.5	12.1
Financial support	12.6	15.3	13.9
Emotional support	10.6	11.0	10.8
Excluded from all child support	7.0	8.1	7.6

 Table 5.6: The percentage of older people who are excluded from child support (N: 1,363)

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Logistic regression analysis was performed to analyse factors associated with the absence of support from children. The exclusion from support from children is assigned by a binary dependent variable, a value of one if the parents are excluded from support from children, and zero if they might get support. The logistic regression method in the analysis assumes that older persons have two conditions: neglected or having support from children. The probability of their situation depends on the factors as described in Table 5.7.

Table 5.7 demonstrates the factors associated with a lack of family support. The model as a whole suggests that the influence of independent variables on the likelihood of exclusion from child support is significant (p<0.05). The result showed a significant variation in child support exclusion depending on the presence of adult children, having a pension and working status. The most significant and consistent factors are the presence of children and working status. Table 5.7 showed that older people who have migrant children only are significantly more likely to lack all types of support. Older people who have non-migrant children only have significantly lower odds of being excluded from all types of child support including financial assistance. It was assumed that migrated children might provide better financial support for their older parents. However, the model demonstrates that non-migrant children are more likely to be asked for financial support. The evidence indicates that the close proximity of children to older parents is crucial in attaining appropriate care. Therefore, many older parents asked their migrated children to return home to take care of them. The practice of asking children to returning home is part of the care negotiation process in older ages.

The 2016 ARIS data shows that among 1,824 older persons, 88 (4.8 percent) have children who returned from the city to take care of their parents. Besides children, siblings (3 people) and other family members (8 people) also moved to the older persons' house because the elderly needed care. The small percentage of returned children in part is caused by the availability of children to co-reside or live near to elderly parents. The majority of older persons (53.9 percent) have both migrant and non-migrant children; the next largest group is those with

migrant children only, at just below 30 percent. A small group at just below 17 percent consists of older persons with non-migrant children (ARIS, 2016). Those non-migrant children might co-reside with the parents or live in the same village.

support from children								
Factors	Type of Support							
	Practical	Financial	Emotional	All				
Male (VS Female)	0.830	0.888	0.778	0.743				
Age Group (VS 60-69)								
70-79	0.695 *	0.590 **	0.784	0.851				
80+	0.727	0.688	1.003	1.115				
Unmarried (VS Married)	0.728	0.590 **	0.764	0.561				
Presence of Children (VS Migrant O	nly)							
Both Migrant and Non-Migrant	0.523 ***	0.713 *	0.605 **	0.577 **				
Non-Migrant Only	0.484 **	0.814	0.578 *	0.457 **				
Village (VS Rejoagung-Javanese)								
Muara (Batak Toba)	1.152	0.893	0.869	0.740				
Cacaban (Sundanese)	0.539 **	0.456 ***	0.573 **	0.494 **				
Bugoarjo (Javanese)	1.066	0.929	0.892	0.952				
Gunungsari (Balinese)	0.607 *	0.620 *	0.444 ***	0.644				
Education Attainment (VS None or le	ess than pri	mary)						
Primary	1.102	0.976	1.283	1.029				
Secondary +	0.626	0.928	0.953	0.774				
Socio-Economic Status (VS Poor)								
Medium	0.609 **	0.703	0.565 **	0.501 **				
Rich	0.884	0.894	0.751	0.711				
Have Disability (VS None)	0.702	0.595	0.550	0.442				
Have Pension (VS None)	1.739	1.569	1.275	2.301 **				
Land Ownership (VS None)	1.277	1.250	1.104	1.179				
Caring Roles (VS None)	0.785	0.779	0.681 *	0.655				
Working (VS None)	1.874 ***	1.864 ***	1.619 **	2.033 ***				

Table 5.7: Logistic regression model: factors associated to the exclusion from having support from children

Note: significance level *** p<0.01, ** p<0.05, *, p<0.1. Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Atun, for instance, was the daughter of an ill elderly man and she previously migrated to Jakarta worked in one of the pharmacist companies there. But she returned home to Giriasih village and she describes the practice of asking adult children to return home to care for their parents:

I lived in Jakarta, worked in Kimia Farma in Cikarang from 1998 to 2005. I decided to return to my village because my father got sick. I do not want my elderly father to be cared for by other people. My father had a disability. In late 2006, he fell down, and in early 2008 he passed away (Giriasih; 01/10/2015, F112G).

This may well be the case when a child felt forced to return home to care for elderly parents because of moral obligations or lack of alternatives. Atun insisted that she did not want other people to take care of her parents so that is why she returned home. In some cases, it seems socially shameful for children if they cannot take care of their parents. If elderly parents are still working, that too can be seen as shameful as it seems to indicate that the children do not care for their parents. Children who do not care adequately for parents are described as "*ran due akal*" (lacking a brain) in Javanese terms, as the children are assumed to neglect their parents (Giriasih, 12/01/2016. M122TM).

The practice of children returning to assist their parents illustrates the negotiation of the ageing process. Van Eeuwijk (2006) maintains that care and support for older people were not and are not automatically assured or reliable, and that care had to be negotiated and renegotiated in every case and from time to time. In many cases, if the unavailable children nearby caring for the elderly, they initiate a family negotiation. As part of negotiating the ageing process, it is common that migrated children are asked to return home. One part of the process may be a proposal to renegotiate a larger inheritance for the children who co-resided with the parents. The children who co-reside with their parents usually inherit the parents' house as a bonus for taking care of them. A local leader in the village of Cacaban, for instance, described the inheritance called *"kadedeh"* describing the practice of giving a larger amount of inheritance for the child who takes care of older parents.

Here, the practice is called kadedeh. For instance, 35 is the amount to be divided into three children, 30 of them is divided equally and addition 5 is given to the child who takes care of the parents as his/her bonus. Sundanese called this practice kadedeh for the care provider, a bonus for the carer (Sumedang, 10/02/2017, M98TM.).

The narrative above describes that the practice of caring for older people is the outcome of negotiations among the parties involved including the older persons, children, and even neighbours. The concept of negotiation is often used to understand the process of decision making about caring for older people who can no longer manage their everyday life. Strauss (1978) regards negotiations as a way of getting things done. The older persons often declared explicitly that they needed help from their migrated children. As part of a negotiation, the older person asks one of their children to co-reside or live near their parents. A case study of Amin (64 years old living with wife and daughter) illustrates another negotiation process where a child is asked to return home. He said that he is happy to socialise with his family, meet relatives and also happy to have a child to take care of him. When I asked about his children, he said that he only had a daughter who previously had been working in Jakarta for four years and was now living with him. Then I asked him did he ask her daughter to return home, he replied "*yes, I asked her to return home as I need someone who takes care of me*"

(Giriasih, 20/01/2017, M35EM). He also mentioned that successful ageing is when the elderly are cared for by their children.

In addition to presence of children, working status is also important in predicting the likelihood of children's support. Older people who are still active economically are more likely to be ignored by their children. There are two possibilities in explaining this pattern. The first is that children might regard their parents as still independent and still able to fulfil their needs, including financial needs, as they are still working. The second is that older people are forced to work as their children to some extent are neglecting them. In the case of Tina, it appears she has to work as her children do not - or cannot - assist her. Tina has five children, of whom four children have moved to cities (two sons and two daughters). One child does co-reside with her, but has mental problems and cannot help her. She added that her children "never" provide financial support as they too are poor. Her children might sometimes return home once in two years or sometimes once a year. To fulfil her daily needs, she works as a seasonal worker in the rice fields. As a seasonal worker, she does not have a regular income, making her life and the family's very difficult. Her income is around IDR 35,000 (around \$ 3.50) a day which is not enough to fulfil the needs of her family (Bugoharjo, 5/02/2017, F34LS). Similarly, older people who have pensions are more likely to be excluded from any support from children, partly no doubt because they see their parents as fulfilling their needs, including financial needs, from their pensions.

5.4 Conclusion

Ageing in rural areas shows the challenges of the new demographic balance where the young generation are more likely to migrate for work in the city, more likely to live in an urban environment and, as a result, less likely to live with their elderly parents. The findings show that the majority of elderly adults now live with their spouse only. A relatively high percentage of older people are also living alone (12.9 percent) thus reduced to a potentially vulnerable situation. The composition of households (living arrangements) clearly vary by gender, ethnicity and social class. Elderly women are more likely than men to live alone, and older men are more likely than older women to live with a spouse. Another factor influencing living arrangements is ethnicity. Ethnicity influences the type of living arrangements of the elderly. In the bilateral kinship system (Javanese and Sundanese), there is no significant difference between male and female children in co-residing with their parents, while parents are significantly more likely to co-reside with their sons in patriarchal communities (Batak Toba and Balinese).

Chapter 5 also explained that one of the key contributing factors to gender inequality in old age, is the disproportionate amount of unpaid care and domestic work that women

provide to their families and communities. Older women are often both care recipients and care providers. The older people who need more care are women, unmarried women (never married, divorced, or widowed), those of a higher age, having no children and members of a lower social class measured by income and educational attainment (low income family and elderly with none or less than primary education attainment). Among family members, women particularly wives and daughters are located centrally as the providers of care and support. In addition to providing unpaid care to husband and other family members, older women also often provide community care or assistance to community members. The significant role of older women in care is caused in part by the cultural values and filial piety of the women's obligations. It is seens as part of a women's obligation to take care of her husband and when it comes to older women needing assistance, the obligation of caring is transferred to children particularly daughters. This cultural value of a woman's role is socially constructed. Social norms defined the roles of women and men; divisions of labour between them; responsibilities; obligations; rights and social sanctions. The dominant role of the daughter and the wife and to some extent the daughter-in-law shows the strongly gendered nature of caring and gender inequalities in caring. The significant role in caring can have serious and negative impacts on older women's health as discussed in Chapter 4.

Apart from gender, ethnicity and kinship systems play significant roles in determining caring responsibilities. The role of male family members, particularly husbands (older men) and sons is very significant in patrilineal communities. Older women in patrilineal kinship systems often named their husband as their primary care giver, much more often than daughters and other female relatives. In contrast, in bilateral kinship systems, the role of the husband seems very limited, as the percentage of elderly men named as care providers is among the lowest. Indeed, in patriarchal communities particularly Batak Toba and Balinese, responsibility for caring for parents falls on the youngest son, and also in particular on the daughter-in-law, through co-residence.

Living arrangements are also a crucial factor influencing who provides care for the disabled elderly. Living with someone is more important than the relationship of older persons to an individual carer. For instance, those living with others (not spouse and children) and those living alone are more likely to receive assistance from female relatives than from a daughter or a son. Number and migration status of children and social class are also crucial in determining how care is provided.

Chapter 5 also elaborated that caring and support for elderly parents operate by involving multiple members within a family and range through subsequent care from habitual care from family, small scale paid care from neighbours and children, community care and institutional care. How care is provided constitutes part of the negotiation of the ageing process. Care has to be negotiated and re-negotiated depending on various situational and

contextual factors. Customary care and small-scale paid care are examples of how care of older persons is negotiated. The role of the community in providing care is also important. Certain traditional institutions such as "*nyumbang*", "*ngirimi makanan*", *zakat* and *sedekah* are employed at the community level as part of a social protection strategy that forms part of the caring system. These traditional social protection schemes play a significant role in the absence of formal social protection in rural communities.

Although children are crucial in providing care for older people, around 7.6 percent of the older people lack support from children either practically, financially or emotionally. The presence of children, the availability of pensions or paid work for older people are strongly related to exclusion from child support. Older people who have migrant children only, and older people who are active economically or receiving pensions are more likely to receive no support from their children. In some cases it might appear that the older people are forced to work to fulfil their needs as their children are to some extent neglecting them. Their economic activity and wellbeing will be explored in a more detail in Chapter 6.

Chapter 6 - Economic Disadvantages among Rural Elderly People: The Need to Develop Economic Support Systems

6.1 Introduction

Chapter 4 explained that working in hazardous environments is likely to influence the health status of older people. Chapter 5 argued that older people who are working are more likely to be excluded from economic support from their children. This chapter analyses the economic situation of the elderly and the factors associated with their level of economic well-being. Assessing their current material well-being provides crucial information for judging how adequately the system of support, both familial and formal support succeeds in fulfilling older people's economic needs. The literature reports that older people tend to have a higher incidence of poverty than other groups (Barrientos, Gorman, & Heslop, 2003; Mujahid, Pannirselvam, & Dodge, 2008). Poverty among the elderly tends to be more permanent than that among other age groups, and they are less likely to emerge from the poverty trap (Hurd, 1990). Old-age poverty is a significant issue because the income of the elderly reduces while their expenditure increases due to increases in health expenditure.

Much of the research on the economic well-being of the elderly is currently conducted in industrialized countries and relatively little attention has been focussed on the economic disadvantages of older persons in rural Indonesia. According to the literature, public pensions cover most older persons in developed countries, and as a result, the older generation is less likely than the general population to be living below the national poverty line (Vos, Lofgren, Sánchez, & Díaz-Bonilla, 2008). Moreover, old-age inequality rates are significantly lower in countries with well-developed pension systems (Barrientos, 2006). The current pension system in Indonesia is fragmented and varies by labour market group, covering only former government officers, ex-armed services personnel and retired workers in the formal business sector. However, the pension system does not cover the informal sector though the informal sector absorbs the larger part of the labour force in the country.

This chapter attempts to compare the economic behaviour of older persons across gender, region and social class. It will examine the economic activities and a range of sources of material support of older persons. The focus on work marks a logical starting point as it represents a significant influence on assets, income and health. This chapter also investigates factors contributing to the level of the economic well-being of older persons, investigating explicitly the influence of financial support from adult children in relieving old-age poverty and the overall income of older people.

6.2 Economic activity and sources of material support among elderly men and women

6.2.1 Economic activity

6.2.1.1 Labour force participation and working sector

Traditionally the material support of older persons has been largely the responsibility of their family, particularly adult children. However, the assistance is often insufficient to meet their basic needs. Therefore, the majority of older people in rural areas are still active economically in the labour force. A high percentage at 61.8 percent of people over age 60 (75.1 percent of men and 48.2 percent of women) surveyed considered themselves to be working. At national level, the labour force participation of older people over age 60 increased from 41.8 percent in 1990 to 51.2 percent in 2010 (Arifin and Ananta, 2016). Keasberry (2001) found the main differences for older people living in rural and urban areas are that in the rural areas the majority of people continue to work and people are less economically dependent of their children. Similarly, Schröder-Butterfill (2004b) found that only a small number of older people rely on children or grandchildren to fulfil their daily needs particularly for material and physical assistance. Those older persons are engaged in economic activities in their old age until they are no longer physically capable.

Agriculture is the major source of employment for older persons in surveyed sites (ARIS). Among those who still work, 82 percent work in the agricultural sector, and the others are engaged in other informal sector pursuits such as petty trade, traditional clothing and food production in ARIS. This type of self-employment is characterised by uncertainties of income, and lacks social protection. According to the older people themselves and local leaders, older people are more likely than the younger generation to work in agriculture. As farmers, the elderly farm their own land while the young adults are often peasants (*buruh tani*) working at other people's farms or on their parents' farm. The term "peasant" refers to a worker who is working on another farmer's land. This terminology might arise because young people usually inherited property from their parents. Therefore, young people who work in the agriculture are mostly "peasants". The head of Giriasih stated:

The primary occupation of the elderly here is farming. There are two types of farmers, including older people who farm their own land and the young people who are peasants. As farmers, the elderly cultivate their own land, and some of them work on the farmers' group plantation. Here, the farmers' groups are quite common; every ten people form a farmer's group (Giriasih, 27/12/2016, M1GKT)

Similarly, the local leader in the village of Cacaban stated that many young people join their parents in working in their ricefields. Even very old people are also still active economically, working on the family farm helped by their children and neighbours. This might indicate that young people have limited access to land in this era, and to some extent are consequently in a vulnerable situation. Lack of access to resources at a young age often leads them to leave the village for uncertain and sometimes unsafe work in the cities. Young women can be particularly affected by these risks.

The land usually passes to the children after the parents' demise. Regarding this, the head of *Poslansia* in the village of Gunung Sari mentioned that in the past, young people were encouraged to work as farmers due to the wide availability of land. However, now young people are encouraged or forced to migrate for better employment due to the scarcity of cultivable land as their parents still hold on to their land well into old age (Gunung Sari, 7/03/2017, F65BI).

Besides rural areas as a source of agricultural work, the likelihood of older people working in the agricultural sector is enhanced by the fact that even after retiring from formal employment, the workers move their efforts into agriculture. For older persons whose last occupation was in the formal sector, retirement does not necessarily mean they would stop working. Some may move to agricultural work. Many of the formal workers prepare to continue working in the agricultural sector after retiring. The official retirement age in Indonesia is 58 for general government employees and workers in state enterprises and 56 for private enterprises. In some cases however, the retirement age for civil servants, especially those in more senior positions, can be extended to maximum of 65 years old. On the other hand, a civil servant can retire early at the age of 50 with a minimum of 20 years of service and for the private sector can retire at the age of 45. Moreover, life expectancy of older persons is increasing, for instance the life expectancy at birth was 71 in 2018. These retirees thus often have have ample time for further work between 10 to 20 years after retirement. Shifting to agricultural work is one of their options.

6.2.1.2 Reasons for working

The high number of older persons' participation in the labour force raises an essential question about its underlying causes. There are four main reasons why older people keep working. The higher social class, particularly those retired from government institutions and other formal sectors maintain that the main reason for working is that the work provides them with something to do (remaining active), to keep fit and avoid disease. The retirees maintain that their pensions are adequate for daily life and working is aimed at keeping them healthy. The case of Anwari at the age of 62 who previously worked as a civil servant at a District Family Planning Office illustrates this.

Before retirement, I bought livestock to keep me active and prevent me from getting ill (agar tidak langsung drop). The price of a male goat is Rp 2 million and Rp1.5

million for a female goat. The price of a cow is Rp 13.5 million, and after eleven months I sold it for Rp 20 million (Bugoharjo, 5/02/2017, M29LT).

Anwari revealed that his plan to raise livestock after his retirement was aimed to provide him with something to do and keep him healthy. He believed that being active economically was beneficial both for his financial independence and for his continued health. The transition from full working hours to retirement is challenging as such people are used to regular work. The case of Tong, a male retired civil servant, describes the need to adapt from working life to retirement. He stated:

I feel confused between working and retirement, sometimes in the morning I take a bath as I usually did when I was actively working, then I realize that I have retired. After that I just sit down, then change my clothes. Then, I take my chopper and go to my rice field. I am still affected by my previous routine (Cacaban, 17/02/2017, M18ST).

Retirement can have an impact on health. Older people can feel lonely and worthless after retirement. The case of Andi, a retired civil servant in Muara aged 81 and living only with his wife stated:

Every day, in the morning at around 9 am, I take my cows to my plantation. I come back home at noon. I return to my plantation again in the afternoon at around 4 pm to 6 pm. I do it to have an activity, for exercise and to keep busy. If I only stayed at home, I might have a lot of things on my mind (banyak pikiran) that in turn might cause a stroke..I have some retired friends who suffered strokes after they retired; it's stupid, what were they thinking (Muara, 16/3/2017, M51TS)

Andi described his economic activity as aimed to avoid illness. For Andi, work is likely to be his exercise and it helps him avoid thinking too much due to lack of activity. He was also motivated by the fact that some of his retirees friends suffered strokes, possibly due to lack of activity after retirement. A similar observation was also made by the head of Giriasih village in which he found that retirees from formal sectors are more likely to get sick and pass away earlier than their contemporaries who remained economically active. The two cases illustrate that being active is the key to healthy ageing. Economic activity in old age is identified as one of the elements of active ageing by WHO (2001) as well as in the Madrid International Plan of Action on Ageing (2002). Continued economic activity is also a strategy aimed at reducing the risks of poverty and being financially dependent on others.

The second reason is that older persons want to make a contribution to their family, particularly for their grandchildren. A significant number of older people maintained that they worried about their children and the future of their grandchildren as many of their children were poor. Therefore, they provided considerable assistance to their children and other family

members in a number of forms, such as assisting with childcare and domestic tasks. Another contribution was financial support to their children and their grandchildren. Older persons are often the economic pillars of multi-generational families (Schröder-Butterfill, 2004). It is a common practice in a rural context that grandparents provide financial assistance to their grandchildren and even sell some livestock to enable grandchildren to access educational opportunities. Some also donate their pensions to their children and grandchildren. As part of the contribution to family, older persons often contribute almost all of their income to their family. Aki, a retiree aged 90 is an example of someone spending almost his whole pension on his grandson. At his age he is very frail and sick, being unable to walk and with poor eyesight. But to support his grandson, he often gives most of his pension as he stated:

My grandchild has burdens (difficulties), I give my pension to my grandson; when I have rice, I sell it so that my grandson can buy food, my pension is Rp 2,150,000, and sometimes I do not get my pension (kadang ga kebagian uang pensiun) if my other grandson asks for my pension, I give it to them (Cacaban, 19/2/2017, M24SS).

The case study demonstrated examples where older people made a significant contribution to their family. Schröder-Butterfill (2004) argued that pensions have dual functions in protecting older people and shoring up wider family networks. Older people's incomes are often used to secure the living of the whole family network, and the accumulated capital of older parents is important in supporting children into economic independence and securing them against risks. Older people also contribute to society by playing a significant role in communities as local leaders and key resource persons as exemplars of local wisdom and culture. Many can become the head of the sub-village (*Kepala Dusun*) and the neighbour community (*Ketua RT*). The literature (such as G. R. Andrews & Hennink, 1992; Biddlecom et al., 2002; Chan, 1997) contains descriptions of the role of older people as providers of support in their families and communities, thus challenging any possible perceptions of the impotence and inactivity of the older generation.

The third reason is that working is their need as they are used to work. A significant number in this echelon insisted that their bodies would become painful if they were not working. They would only stop working if they became too frail and unable to work anymore. Therefore, many of them argue against any requirement for a retirement age for the elderly. To cope with increasing frailty due to their age, older adults usually change their farming activity from rice cultivation to the more easily managed "hard" type of plantation such as fruits and cocoa. According to older people, cultivating rice is not appropriate for the elderly particularly those in their 70s or above as rice needs strong physical activity, while the "hard" type of plantation requires lighter work. Juki stated:

I have an orange plantation, in the past I cultivated rice, and now I have an orange plantation. The plantation is more beneficial, the fertilizer is not too difficult compared to rice which is complicated ("padi ribet"). It is easier to plant oranges than rice. Digging soil for rice is very tiring ("pare macule tobat") (Rejoagung, 02/03/2017, M57JS).

The case of Juki illustrates an effective adaptation strategy to deal with increasing frailty due to advancing age. Older people might choose to move to the type of crops that are beneficial and easier to grow, given their lower levels of physical strength. Rice fields usually need more physical effort while fruit gardens require less. Therefore, many older people change their type of farming activities as they age.

The last reason is that older people from low-income families insist that working is needed for higher earnings and as part of their survival strategy. The children may experience their own financial difficulties, and the parents cannot always depend on working children for financial support. Often family poverty forces them to continue working to fulfil their daily needs. A case which was mentioned earlier, that of Tina (64 years) for instance, illustrates that working is a survival strategy as she cannot rely on what little financial support her children can provide. In addition, for survival, she works in order to receive health care for herself and other family members. Tina is 64 and suffers from typhoid and a tumour. She lives with her two disabled aunts, Nah (90 years) and Mah (87 years). Tina has to work to pay her health care and for her two aunts. Tina has little option but to work because the support system from family and government are both weak.

6.2.1.3 The variation of occupation by gender and geographic location.

The pattern of work between elderly women and men indicates a division of labour. Elderly men are more likely to work than women (75.1 percent v 48.2 percent). Figure 6.1 presents the percentage of older persons who are working through 2016 by age and sex. The numbers decline steadily with increasing age for both men and women. Just below two-thirds of people aged 60-64 were still working compared to more than half of those 70-74 and only 31.5 percent of those aged 80 and older.

Sex is one single important factor in labour participation rates at all ages and more discontinuous working careers. Elderly men are more likely than elderly women to have worked, with a relatively high difference for each age group. Among those 60-64, the employment rate among elderly men was just over 90 percent of men, much higher than women at slightly more than 60 percent. By age 80 and over, although only just over 45 percent of men were still working this was still more than twice the 20 percent of women who were still

economically active. The higher labour force participation among elderly men may arise largely from the common assumption that responsibility for earning rests more on men than women.

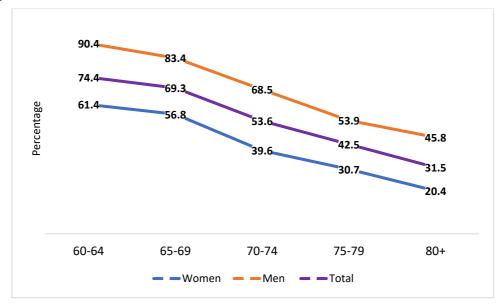


Figure 6.1: The percentage of older people who are working past 12 months by age and gender

This pattern might also reflect the general pattern of gender inequality in Indonesia. Indonesia is ranked 88th on the World Economic Forum's Gender Gap Index, behind other ASEAN neighbours such as the Philippines (rank 7), Laos (rank 43) and Thailand (rank 71). Indonesia also has a 'medium' score on the OECD's Social Institutions and Gender Index. Inequality between women and men occurs in the household at the macroeconomic level – meaning that women are less likely to have decision making power or influence over their own lives, and more broadly over how resources are allocated in society (Gibson, 2017).

Regarding the type of work, a division of work exists in which elderly women are more likely to work in the market place, home industries and petty activities within their home, such as weaving and food processing, whereas men are more likely to work outside the home in jobs needing physical activity such as fish ponds, and coconut plantations. Although the work is beneficial through providing more financial independence, more decision making power and social networking, these benefits can only be fully reaped when the work offers reasonable conditions, with fair income, personal development and social protection. Much of the work conducted by the older persons particularly elderly women does not offer reasonable conditions. Older women work mainly in informal sectors without social protection, and conditions to some extent are hazardous. Older women are often working in poor working environments such as ergonomically monotonous working positions, sometimes involving manual handling and heavy loads. Much agricultural work is also arduous in nature, involving

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

long hours of work, lifting and carrying heavy loads; prolonged bending and stooping; exposure to extreme temperatures (wind, rain and sun). Atun's case describes the hazardous working conditions of older women. She is 88 years old. She usually goes to her farm around three kilometres from her home. She plants corn, chili, cassava and spinach. Her working day begins at around 8 am and ceases at 4 pm. Such an eight-hour working day represents excessive working hours for her age. She also mentioned that she is usually alone on her farm as it is very far from the village. Sometimes she encounters a group of monkeys and thus she worries about her safety and her crops. But she has to guard her farm in order to protect it from the monkeys who steal farmers' crops when they can. She might also be exposed to extreme temperature as well as wind, sun and rain (Giriasih, 4/01/2017, F4GKI).

Those work divisions illustrate the gendered nature of occupation where some occupations are seen as appropriate to one sex only. For instance, in clove plantations, elderly men usually harvest the cloves from the trees while elderly women usually collect and sort the cloves. Other examples are weaving, and *melinjo* chip processing (*emping melinjo*), which are seen as only appropriate for women (Picture 6.1) while working on a fish farm and climbing the coconut trees are only appropriate for men. In addition to appropriate work by sex, there are also some common type of work handled by both sex including ricefields, livestock rearing, coffee plantation and petty trade (petty trade is mostly conducted by elderly women). The world of work between men and women has been widely documented. Hochschild (1983), for instance, pointed out that the "emotion work" is usually perform by women. Women are compelled to do certain occupational roles, such as showing nurturing behaviour and friendliness in their jobs as flight attendants, nurses, and waitresses.



Picture 6.1: An elderly woman doing weaving in her house which is common conducted by elderly women in Muara (Photo taken 16/03/2017)

In addition to gender, occupational variation also occurs according to region or location. The variation in type of work is caused by different available resources and environments surrounding the older people. In scarce water areas like Giriasih, older people usually plant hard types of plants such as mahogany (*mahoni*), teak (*jati*) and acacia. Those timbers are usually used for furniture. As a lot of resources are needed for those types of timber, some older people work in furniture and timber processing (Picture 6.2). Older people also plant cassava, corn and chili. Some of the elderly in Giriasih directly sell this produce at the closest traditional market.



Picture 6.2: Two elderly men are being interviewed when they were working in making furniture in Giriasih (Photo taken 01/10/2015)

In Muara, fishing surrounding Lake Toba is also often conducted by elderly men. Older people also work in farms that produce mangoes, *rambutan* and other fruits in Muara. In Gunung Sari, older women usually work in producing food usually used for religious ceremonies. Many religious events appear on the calendar, such as *galungan, kuningan* and other ceremonies featuring traditional food. Some prominent scholars (such as Belo, 1953; C. Geertz, 1973) elaborated the importance of ritual in Hindu Bali. A wide range of tasks associated with ritual provide job opportunities for Balinese women, particularly on the preparation of intricate offerings (Nakatani, 2003). Older men in Gunung Sari also usually plant cloves, coconut, durian and banana in their farm (Picture 6.3). Cloves and durian are among the most popular farm product from Gunungsari.



Picture 6.3: An elderly man is climbing a coconut tree among banana and clove trees on his farm in Gunung Sari (photo taken 5/03/2017)



Picture 6.4: an elderly man in his orange farm in Rejoagung (photo taken 1/03/2017)

In Cacaban where water sources are abundant, older people plant rice, cassava, banana and sweet potato. Due to ample water sources, they also breed fish near their house or farm. In Rejoagung, older persons particularly older men plant orange trees (Picture 6.4). The name of orange is "Semboro Orange" (*jeruk semboro*) taken from the sub-district name "Semboro Sub-district/Suburb). This orange is one of the most popular in Indonesia and is often farmed by older people.

In Bugoharjo, one of the most distinct occupations for many senior persons is fishpond farming. Various types of fish are bred in the ponds including shrimp, catfish, parrot fish and carp. The most popular and profitable breeds are shrimp and catfish (Picture 6.5). Due to their popularity, catfish have become a district symbol. A majority of migrated children from Bugoharjo are self-employed selling fried catfish (*warung pecel lele*) in big cities such as Jakarta, Yogyakarta and Surabaya. Beside those variations, common occupations are rice-and coffee-farming (Muara and Gunung Sari).



Picture 6.5: An elderly worker smokes while harvesting shrimp in Bugoharjo (photo taken 5/02/2017)

In some communities, work-seeking strategies also differ between elderly men and women. The women use religious activities such as prayer meetings in the mosque to seek information about jobs in agricultural sectors. Farmers who need workers will ask the women to work with them after prayer in the mosque, or the women will seek out other employers who need casual workers on their farm. In contrast, the men tend to hang out in coffee shops to gain working information. Farmers who need workers will seek the workers in the coffee shops, particularly in the morning before going to the farm. Therefore, in the morning, the coffee shops are full of workers waiting for farmers. The village of Bugoharjo, for instance, has around six coffee shops spreading across the village and one of them is well placed in the middle of rice fields and fish ponds as can be seen in the picture 6.6.



Picture 6.6: Traditional coffee shop (photo taken on 6/2/2017)

Photo 6.6 describes a traditional coffee shop located in the middle of rice fields and fishponds which is quite far from the village. The coffee shops are the only building among the very large community fish ponds. Most elderly men are working in the fish ponds while elderly women usually prepare food for their spouse. Photo 6.6 also shows three motorcycles commonly used by older men for transport from home to fishpond and to bring stockfeed for their livestock.

6.2.2 Unequal income and sources of material support (personal income)

Elderly people can have six sources of personal income, including income from farming, wages, child transfers, pensions, farmland rents and others (for example: transfer from relatives, charity and government support etc.). In Indonesia, government income support to the elderly is low. Table 6.1 indicates the percentage of older persons who received any income from a variety of potential sources. Money from children is reported most frequently as the major source of income among elderly people (72.3 percent) while income from renting farmland is the least common (7.5 percent). Over half of older people receive income from farming. Just over 14 percent enjoy income from wages, just over 9 percent from pensions and just below 12 percent from other sources.

Source of	A	All	Female		Male	
Income	%	Mean	%	Mean	%	Mean
	Receiving	Income	Receiving	Income	Receiving	Income
Child	72.3	130,634	75.0	146,744	69.2	112,108
transfer						
Farming	50.5	449,021	41.0	370,339	61.4	539,752
Wages	14.5	93,988	10.9	69,472	18.6	122,258
Pension	9.2	182,616	5.6	131,318	13.4	241,771
Renting Farmland	7.5	44,317	6.5	37,037	8.7	52,713
Others	11.9	85,084	13.2	80,230	10.5	90,683
All Income	95.9	984,788	94.0	833,975	98.0	1,158,698

Table 6.1: The percentage of older persons receiving personal income and monthlymean income in the past 12 months by Source of Income and Sex (N: 1,645)

Bold= p value < .05

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

It is interesting to note that the mean monthly income from farming is distinctly higher at IDR 449,021 (around \$45) than any other sources of income. Pensions however are the most stable income compared with other sources. Other incomes are not regular due to the nature of work in agricultural sectors. The mean income from renting farmland is the lowest of all. Older men receive higher percentages of income from farming, wages, pensions and renting farmland than older women. However, women report receiving a higher percentage of income from children and others than older men. Table 6.1 also demonstrates that older men have significantly higher mean income from all sources than older women. This indicates a clear personal income inequality between elderly men and women. This inequality often places older women among the world's poor, and in a more vulnerable situation. Lower income among older women can mean that they need to support themselves. At the same time they incur responsibility for unpaid domestic and caring duties, implying little availability of leisure or rest time that might in turn affect their health and wellbeing.

Number of income	All Sex		Age Group			
source		Female	Male	60-69	70-79	80+
None	4.2	6.0	2.0	3.0	3.7	10.1
One source	36.8	43.0	28.4	34.0	37.0	44.0
Two Sources	48.6	43.5	59.0	52.3	52.5	39.9
Three Sources	9.7	7.3	9.6	9.7	6.8	6.0
Four Sources	0.7	0.2	1.1	1.1	0.0	0.0

Table 6.2: The number of older people's source of income (N:1,645)

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Table 6.2 describes sources of income among the elderly. It shows just below half of older persons in rural areas have two primary sources of income, and a small percentage (0.7 percent) have four sources of income. Those who have no income were reported at just over 4 percent. This group can be categorized as vulnerable. Table 6.2 also describes the variety of income sources among elderly men and women. Far more women than men report no

source of income, a pattern consistent with the lower levels of economic activity among older women. Moreover, the majority of elderly women and elderly men have two sources of income, but the percentage of elderly men who have two sources of income is higher than elderly women (59 percent vs 43.5 percent). This implies that the women have a lower level of economic wellbeing than elderly men. However, elderly women are more likely to receive financial support from children (Table 6.1). The mean income received from children is also much higher for women than men. In contrast, men are modestly more likely than women to report farming, wages, and pensions as sources of income as well as farmland rental. Table 6.2 also indicates that the sources of income decreased as age increases. For instance, 29.5 percent of older people at age 60- 69 have two sources of income. This figure decreases dramatically to just below 15 percent for those in their 70s, and just over 4 percent for people above 80.

6.2.3 The role of financial support from children

The previous section elaborated that money from children is reported as the most frequent primary source of income among older adults (72.6 percent). This section elaborates the relationship between child transfer and overall income. Overall income of older people was measured by summing up income from farming, wages, pension and renting farmland. Figure 6.2 describes bivariate analysis that shows the association between children's financial support with the overall personal income of the elderly.

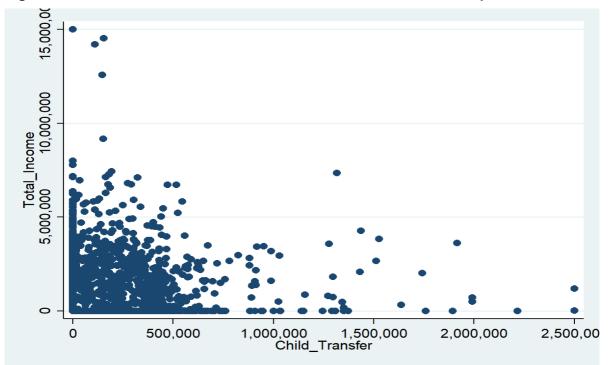


Figure 6.2: The association between child transfer and overall older persons' income.

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

The regression shows a negative association between financial support from children and the overall income of older people. The regression shows if there is an increase in 1 percent of an older person's income, we can expect a decrease of 10 percent in financial support from children (2016 Ageing in Rural Indonesia Survey). Figure 6.2 shows that the children's transfer is concentrated for those elderly who have lower levels of personal income. It indicates that the children are less likely to provide significant financial assistance to those parents who have regular or high personal income. Financial support from children plays a significant role in providing income for parents with low or no personal income

The significant association between financial support from children and overall income of older persons can be seen in the association between the amount of financial support from children and economic activity of their parents. The financial support from children is a continuous variable and economic activity of older persons is the binary variable. The regression test shows a significant association between child transfers and the working status of older persons. Older persons are significantly less likely to work by increasing amount of financial support from children.

The qualitative interviews also found that the transfers from children are often not enough to fulfil the needs of the parents. Therefore, many of them stated that they have to work as they do not want to burden their children and the transfer to some extent is relatively low. A case of Juki, a male of 68 who is living alone, might illustrate how financial support from children is often insufficient, and how working becomes a survival strategy to secure more financial independence and fulfil basic needs. He stated:

I have to work during my life whatever the type of work may be, such as breeding chickens, at least I have an income, if I am not working, I cannot afford to buy food, even though my children give financial support I will keep working. If I am not working how can I live? (Rejoagung, 03/03/2017)

Based on this, the parents should not rely on financial support from adult children as the support is not regular and stable, even though the type of work they engage in might be hazardous for the health of the parents, as discussed in Chapter 4. Therefore, there is a need to develop and provide an appropriate support system through pension reform and improving working conditions. The increasing numbers of the older generation in Indonesia also need to be considered in preparing support systems for the ageing population. The number of growth of senior citizens is the fastest of any other age cohort. The percentage of older persons in Indonesia increased gradually from 4.5 percent in 1971 to 7.6 percent in 2010 and is predicted to increase to 15.8 percent by 2035 (Adioetomo & Mujahid, 2014).

6.2.4 Economic disadvantages among elderly people

To identify the economic disadvantage of the elderly, deprivation approach was employed (Townsend, 1979). In this approach, several indicators of disadvantages are obtained and a summary of material standard of living is identified by how many of this measures of disadvantage the respondent has experienced (McDonald, Son, Utomo, Utomo, & Hull, 2016). Twelve measures of disadvantage could serve as indicators of life-style deprivation. Four indicators relate to the dwelling and eight indicators relate to the financial situation. In relation to poverty, dimensions of dwellings including the material of the floor, sanitation, electricity sources and the source of drinking water are likely to indicate the poorest part of the population. The "financial situation" category employs 'classic' deprivation measures because they indicate that the respondent lacks the necessary money for essential items like food, clothing, and medicine. The financial dimension also uses measures relating to the self-assessed financial situation (satisfaction questions) and individual income. For each indicator, the cut-off point that can be considered as best indicator of deprivation or inequality is described in Table 6.3. Those who experience such problems were given values of 1, while the remaining categories have been scored as zero.

Dimension	Measure	Indicator
Dwelling	Floor material	Soil and bamboo
	Sanitation	Other than Own latrine
	Source of drinking water	Springs and rain water
	Electricity source	PLN without meter and no electricity
Financial	Self-assessment of	Inadequate or very inadequate
situation	financial situation	
	Personal income	Low personal income (percentiles of lowest
		personal income)
	Asking for financial help	Asked for financial help from family, friends or neighbour
	Bill payment	Unable to pay bill on time
	Sold or pawned something	Sold or pawned something
	Purchasing food	Sometimes went without food
	Purchasing new clothes	Unable to buy new clothes
	Purchasing medicine	Unable to buy medicine
0		

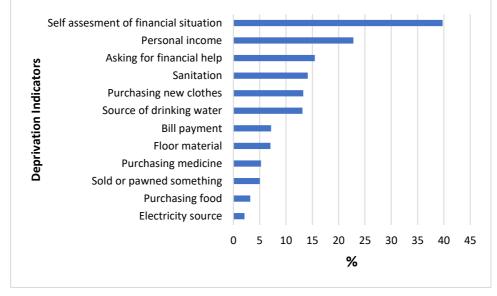
 Table 6.3: Component measure of material deprivation in the past 12 months

Source: 2016 Ageing in Rural Indonesia Survey

Material deprivation is defined by how many of these measures of disadvantage the respondent has experienced. The reliability of the measure is enhanced if the 12 component

measures vary in their frequency across respondents. Figure 6.3 describes the proportion of older people experiencing material deprivation.





Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Across the measures shown in Figure 6.3, the deprivation varies from just over 2 percent of the sample who are without electricity from the National Electric Company (*Perusahaan Listrik Negara-PLN*) or those without electricity at all, to just below 40 percent who rate their financial situation as inadequate or very inadequate. The *Perusahaan Listrik Negara* (PLN) is a nationally-owned electric company. Just below 98 percent of older people's houses have PLN as the electricity source. The houses that use PLN without meter usually use their neighbours' electricity as a source due to inability to pay electricity bills. Due to poverty, a small number of houses where elderly people are living also lack electricity. The use of *Perusahaan Listrik Negara* without meter or cases totally without electricity are then considered as one of the deprivation indicators.

Soil or bamboo as a flooring material is also an indication of poverty. The Ministry of Social Affairs often uses this indicator to identify poor households. Seven percent of older persons occupy a house with soil or bamboo floor materials, while the majority (around 67 percent) have houses with cement and ceramics as floor materials. Cement and ceramics are considered of higher quality than soil or bamboo.

A house lacking a latrine or toilet also might indicate deprivation. Figure 6.3 describes that 14.1 percent of older people live in a house with no toilet. They usually use their neighbour's toilet or defecate in the open. Open defecating is often conducted in the river, particularly among the elderly communities who are surrounded by rivers such as in the

villages of Muara and Bugoharjo. Open defecation is also often conducted at plantations. Open defecation is of course a serious health issue affecting the health of communities.

Another indicator of deprivation is a source of drinking water. The use of only a spring or rainwater for drinking water might also indicate deprivation. The unavailability of clean water is a severe problem faced by elderly communities, particularly in Giriasih (where water is scarce) and Bugoharjo (where much water is salty). The better-off families usually buy water for drinking and daily needs, but the poor mostly rely on rainwater and spring water. Just over 13 percent of respondents rely on spring and rainwater as a source of drinking water. The poorer ones also often have to walk about one to three kilometres to gain water from a spring. Carrying a heavy water container also exacerbates their deprived condition. Based on this situation, using spring and rainwater as a source of drinking water can indicate deprivation.

An inadequate or very inadequate self-rated economic situation also indicates deprivation. Just below 40 percent of the elderly rated their economic situation as inadequate or very inadequate. Another measure of deprivation is the difficulty in meeting expenses. This difficulty is measured by such factors as: the need to seek financial help; difficulties in paying bills; the need to sell or pawn possessions; lack of money for food; difficulty in purchasing new clothes and medicines. If any of these occur in a calendar year, a further state of deprivation is evident. Across these measures, the number of the deprived varies from just over 3 percent ("sometimes went without food/purchasing food") to just over 18 percent ("asking financial help from family, friends and neighbours").

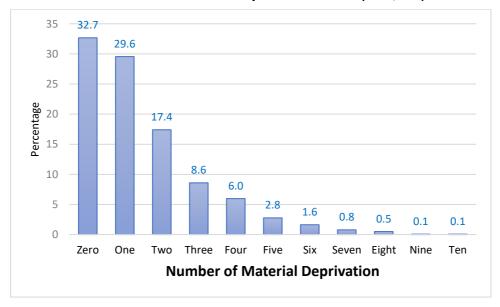


Figure 6.4: The distribution of material deprivation index (N: 1,645)

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

The last indicators of material deprivation represent status at the lower end of the personal income scale. Income is often used as a primary indicator of economic wellbeing,

though it is really only one dimension of it. To identify low personal income, percentiles of all of the income of the elderly are employed.

To create a deprivation measure, the summary measure of deprivation is obtained by adding up the number of disadvantages that a respondent has experienced. This measure ranges from 0 to 10. Figure 6.4 shows the sample distribution of respondents by the number of disadvantages suffered by this cohort. The distribution has the expected shape with the largest number of elderly people having no disadvantages and no respondents having all 12 disadvantages.

Examining this distribution, there seem to be four groups: those with 0 disadvantages who might be classified as 'Good'; those with 1 disadvantage who might be described as 'mild'; those with 2-3 disadvantages who might be described as 'fair/medium'; and those with four or more disadvantages who might be described as 'disadvantaged' or 'poor'. The distribution across these four categories is displayed in table 6.4.

Economic Wellbeing	All	Sex	K	Age Group		
	-	Female	Male	60-69	70-79	80+
Good	32.7	24.6	35.2	33.7	25.5	20.6
Mild	29.6	28.3	29.6	28.3	29.8	29.4
Medium	26.0	33.0	24.1	28.1	28.6	33.0

11.1

10.0

16.1

17.0

14.1

Table 6.4: The distribution of economic wellbeing among older people by sex and age aroup (N: 1.645)

11.8 Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Poor

As can be seen in the Table 6.4, the poorest category can be described as deprived or poor, at 11.8 percent. The percentage indicates a significant proportion of elderly people are poor. This percentage is close to the amount of poverty among the elderly (60 years and older) at 12.6 percent nationally as reported by TNP2K based on the March 2012 Susenas data. It indicates that around 2.5 million of the elderly are considered as poor in Indonesia (Priebe & Howell, 2014). Those who have no experience of economic disadvantages (good economic wellbeing) shared the highest percentage at 32.7 percent. This group can be considered as the "haves". Those in the medium and fair category shared lower proportions at 29.6 percent and 26 percent respectively.

Table 6.4 also shows that the incidence of poverty is higher among elderly women. Elderly men have a significantly higher percentage of better economic well-being compared to the women. Just over thirty-five percent of elderly men reported no economic disadvantages compare to the women at 24.6 percent. Women reported having more than four material deprivations (poor) which is significantly higher at just below 14.1 percent compared to elderly men at just over 11 percent. It indicated that elderly women are more vulnerable to poverty than elderly men. The percentage of poor older persons increases by age group from 10 percent at the age of 60-69 years to 17 percent at 80 and over.

Turning to measure poverty using household income using the Indonesian government's standard poverty line, the proportion of poverty among older people is very high. Using the poverty line as a measure, the household is classified as poor if household income is below the poverty line that differs by province and rural/urban areas. Household income is calculated by summing up all household income and dividing this figure by the number of persons living in the household. Based on this method, it is estimated that just over 40 percent of the elderly is classified as poor or living in a low-income family. This percentage is much higher than individual economic deprivation measure discussed above.

6.3 Determinant of economic wellbeing: socio-demographic characteristics and coping capacities of older persons

As outlined in Chapter 2, three groups of factors might influence the health status and disability level of older persons, including socio-demographic exposure, coping capacities and social engagement (Schröder-Butterfill & Marianti, 2006; Van Minh et al., 2012; Cao & Rammohan, 2016; Glass et al., 2006). In the analysis, I also added health status as a predictor. Albert Isaac Hermalin (2014) found that there is a two-way relationship between economic disadvantages and health status.

Ordinal logistic regression analysis was performed to study the association between material deprivation measures and demographic characteristics, social engagement, and coping capacities. As outlined in the previous section, the outcome variable for this model is economic deprivation, identifying four categories. These include those with no disadvantage who are classified as 'Good'; those with one disadvantage who are described as 'mild'; those with 2-3 disadvantages who are classified as 'fair/medium'; and those with four or more disadvantages who are classified as 'high disadvantage' or 'poor'.

There are two models of which the first model examines the determinants of economic disadvantage among older people in the whole village by excluding the pension variable. In the ARIS survey, pension was not asked about in Giriasih Village (The data collection in Giriasih village was the pilot test for the ARIS Survey). The second model examines factors associated with economic disadvantage by involving the pension variable (excluding Giriasih). Table 6.5 describes the odds ratio of the correlates of economic well-being among the elderly. The model as a whole suggests that the influence of independent variables on economic wellbeing is significant (p<0.05). The result showed a significant variation of economic wellbeing depending on socio-demographic characteristics and coping capacities. Table 6.5 describes economic wellbeing by gender, social class, region and coping capacities.

Table 6.5: Ordinal logistic regression model: determinant of economic deprivation of
older persons

Predictors	Model 1 (Exclude Pension, N:1,639)	Model 2 (include pension, N: 1,408)
SOCIO-DEMOGRAPHIC EXPOSURE		
Male (VS Female)	0.828 *	0.957
Age Group (VS 60-69)		
70-79	1.238 **	1.199
80+	1.036	1.051
Married (VS Unmarried)	0.911	0.868
Present of Children (VS Migrant Only)		
Both Migrant and non-migrant	1.091	1.050
Non-migrant only	1.322 *	1.320
No children	3.221 ***	3.129 ***
Village (VS Rejoagung)		
Giriasih	4.809 ***	
Muara	5.278 ***	5.967 ***
Cacaban	2.740 ***	3.112 ***
Bugoarjo	1.058	1.083
Gunungsari	2.191 ***	2.356 ***
HEALTH STATUS		
Having Disability (VS None)	1.460 **	1.347 *
COPING CAPACITIES		
Receiving Raskin (VS None)	2.187 ***	1.964 ***
Has Pension (VS None)		0.283 ***
Having Livestock (VS None)	1.012	1.070
Education (VS None or less than primary)		
Primary	0.647 ***	0.656 ***
Secondary +	0.313 ***	0.376 ***
Having Farmland (VS None)	0.612 ***	0.555 ***
SOCIAL ENGAGEMENT		
Work (VS None)	0.740 ***	0.592 ***
Cut 1	-0.700	-0.917
Cut 2	0.759	0.565
Cut 3	2.567	2.310

Note: significance level *** p<0.01, ** p<0.05, *, p<0.1.

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

6.3.1 Risk factors of economic disadvantages among elderly people

6.3.1.1 Being elderly women

Model 1 in Table 6.5 shows the proportional odds ratio of comparing older men to women on economic disadvantage, given the other variables in the model are held constant. For older

men, the odds of experiencing higher economic disadvantage versus the combined medium, mild and no disadvantage are 0.828 times lower than for older women, given the other variables are held constant in the model. Likewise, for older men, the odds of combined categories of high and medium economic disadvantage (versus mild and no disadvantage) are 0.828 times lower for older men compared to women given the other variables are held constant in the model. It indicates that elderly women are more vulnerable to poverty than the men. It also indicates that sex constitutes a critical social force in the experience of ageing, and sex is considered a prevalent indicator of inequality. The likelihood of elderly women having lower economic wellbeing depicts the system in the community in which men are the conventional breadwinners, responsible for earning money. Moreover, men and women often differ with regard to earlier life-course opportunities, which then influence their access to socioeconomic resources in later life. Men often have attained higher education levels than women and that in turn often contributes to inequalities in income-generating occupations, with men enjoying higher incomes and benefits. Men tend to benefit in greater proportions from pensions and retirement programs because they are more likely to work outside the home than women (J. E. Phillips et al., 2010). However, the association of sex and economic wellbeing is insignificant after putting in all factors as described in model 2 at Table 6.5.

The higher life expectancy of women might contribute to a higher risk of a lower level of economic wellbeing. Older women tend to be widowed, placing them in a more vulnerable situation economically than men. The percentage of widows is much higher at 24.3 percent than widowers at 5.7 percent. A case study of Bariyah, an older woman aged 65 living in Cacaban village, is an example of a poor elderly widow. Due to lack of resources, she still works as a saleswoman. She sells snacks, fried foods, *bakwan*, crackers and salted fish, as she walks around the village from one place to another to offer her goods. She lives alone as a widow, as her children have migrated to the city. She received financial support from her husband when her husband was still alive (Cacaban,16/02/2017, M16ST). This case illustrates how elderly women have to work to fulfil their needs after their husbands pass away. Longer life expectancy without appropriate savings and assets can put older people into a more vulnerable situation.

Rudkin (1993) found that variations of economic well-being among elderly men and women were attributed to the disadvantages experienced by women throughout their adulthood. Access to job opportunities becomes more difficult for women because of social expectations that they will take on a larger share of household tasks. When women do enter the workforce, they face social norms about which industries or type of work may be appropriate to their gender, as discussed in previous sections. In the region where tobacco is the main agricultural product such as Jember District, for instance, the most common type of young women's work is in the tobacco industry. Those young women are usually supervised by male workers. The low skilled work in tobacco industries is seen as only suitable for female labour and women face limited opportunities if they move out of the tobacco industry.

Moreover, female workers are more likely to stop working or cease wanting a job because they are supposed to take care of children and other family members. Culturally, it is women's responsibility to take care of family when family members particularly children and older parents need care. The Transition to Adulthood Survey in Greater Jakarta concluded that the main reason that young women do not look for work is that they "prefer staying home with children" at around 34.4 percent. The second reason is "there is no person taking care of children" at 18.8 percent. The third reason is "not allowed by their partner to work", which is accounted for 13.2 percent. Those reasons are strongly related to the social division of labour within households where husbands work in market sectors as the main income earners while wives perform domestic chores (Ulil Absor & Dwisetyani Utomo, 2017). This situation leads to inequality in economic wellbeing in their later life.

Women also have limited access to assets such as land and property in patriarchal communities such as the Balinese and Batak Toba, because a woman becomes part of her husband's lineage at the time of marriage. In Batak Toba, a women after marriage is not entitled to her father's estate (Ihromi, 1994). Culturally daughters cannot inherit from their parents. In patrilineal communities, families desire sons to continue the line of descent and consequently pass land and other valuable properties to sons. Among the Balinese, even if there is no son in the family, the daughter cannot inherit from her parents. In that situation, the inheritance goes to the parents' nephew. Limited access to assets can increase women's vulnerability to economic disadvantages in their later life. Owning land is very important for food production in rural areas. Access to land and property also is fundamentally linked with access to credit and without resources older women would often have difficult in accessing this.

6.3.1.2 Older persons who do not have children or have non-migrant children only.

Models 1 and 2 at Table 6.5 (p. 173) assume the likelihood of experiencing poverty in old age is associated with migration or presence of children. For older persons with non-migrant children only, the odds of experiencing high economic disadvantage (versus medium, mild and no economic disadvantage categories) are 1.322 times higher than older persons with migrant children only. For older people who do not have children, the odds of experiencing high economic disadvantage categories are 3.221 times higher than older persons who have migrant children only, given the other variables are held constant (model 1).

The qualitative interview also found that the elderly with no children were among the most economically disadvantaged group. The local term used to describe the elderly who are poor and without children is "*sebatangkara*". The case of Ida, an elderly woman at the age of around 60 years old, is an example of the *sebatangkara* elderly. She lives alone, does not have children and she never married. This situation identifies her as "*sebatangkara*". She has a slight mental problem (stress). Stress is often used in a local context as someone who has a slight mental problem. According to the village head, her problem might be caused by her loneliness and the difficulties in fulfilling her daily needs (Giriasih, 17/01/2017, M45TM). Lack of economic support from children in old age might lead to experiencing economic disadvantages in later life.

Similarly, a local leader in Cacaban village stated:

The very unfortunate older people are those without children. They would go from one place to another, they are cared for by sisters or by a niece (Cacaban, 16/02/2017, M16ST).

The statement from Cacaban local leader describes that older people who do not have children are the most vulnerable due to lack of carers. They are usually cared for by their niece or sister and to some extent the care shifts from one place or person to another to ease the burden on the care providers.

Remittances from migrated children can influence the financial status of parents. The mean financial support of migrated children only is significantly much higher than the non-migrant children only category and higher than those with both migrant and non-migrant children. The mean annual financial support from migrant children was IDR 2,044,034 (around \$200) which is much higher than non-migrant children at IDR 706,343 (around \$70) and having both migrant and non-migrant children at IDR 1,610,599 (around \$160). However, model two shows there is no association between migration of children and economic disadvantages.

6.3.1.3 Non-Javanese ethnic groups

The non-Javanese residents face a significantly greater likelihood of poverty than their Javanese counterparts. Model 2 at Table 6.5 (p. 173) illustrate that older persons living in the village of Muara (Batak Toba), for instance, the odds of experiencing high economic disadvantage (versus medium, mild and no economic disadvantage categories) are 5.967 times higher than older persons living in the village of Rejoagung (Javanese). For older people living in the village of Gunung Sari (Balinese), the odds of experiencing high economic disadvantage versus the combined medium, mild and no economic disadvantage categories

are 2.356 times higher than older persons living in the village of Rejoagung (Javanese). For older people living in the village of Cacaban (Sundanese), the odds of experiencing high economic disadvantage versus the combined medium, mild and no economic disadvantage categories are 3.112 times higher than older persons living in the village of Rejoagung (Javanese). Model 2 also describes that there is no significant different odds ratios between older people living in Javanese villages (Rejoagung and Bugoharjo). However, model 1 illustrates that older people in the village of Giriasih (Javanese) have higher odds of economic disadvantages than older people in the village of Rejoagung. Giriasih's location in an arid area with limited water resources might explain this variation. Fertile land and abundant water resources are very important for agricultural pursuits.

This chapter argues that there are two main reasons why Javanese older people have substantially lower economic disadvantages. The first reason is that older people in Javanese villages (Giriasih, Rejoagung and Bugoharjo) are more exposed to social protection and empowerment programs conducted by the Indonesian government than other villages (such as Cacaban, Muara and Gunung Sari). Based on the 2014 Village Potential Statistics (PODES) data, all Javanese villages (Bugoharjo and Rejoagung) received the National Program for Rural Community Empowerment (*Program Nasional Pemberdayaan Masyarakat Mandiri Perdesaan-PNPM Mandiri Pedesaan*) program. The National Program for Rural Community Empowerment is the largest community-driven development program in the country. The objective of *PNPM Mandiri Pedesaan* is to alleviate poverty by having the communities design their development agenda. Improving access to education and creating a job is part of the *PNPM Mandiri Pedesaan* program. The two programs are likely to be beneficial economically for older persons in the village.

Other poverty alleviation programs such as house reconstruction (*Program bedah rumah/plesterisasi*) and sanitation are also more easily available to villages in Java. The village of Bugoharjo, for instance, has access to the sanitation and house reconstruction program which is likely to be beneficial for senior citizens as stated by the head of Bugoharjo:

Another program is house reconstruction (plesterisasi) delivered to those households with a soil floor, including older people. Another program is sanitation through providing an appropriate toilet to 10 needy households (Bugoharjo, 4/02/2017, M28LT)

Another indicator of unequal exposure to government programs is access to *Beras Miskin-Raskin* (Rice for the Poor) program. The percentage of elderly who received the *Beras Miskin-Raskin* program in the villages in Java is significantly higher compared to villages outside Java (ARIS, 2016). Rice for the Poor program is a food security program targeting poor households that is likely to benefit older people in poor households. This program is a crucial

component of social protection policy, especially in Indonesia, where there is still widespread evidence of poor nutrition, and the poor still spend around 25 percent of total expenditure on rice.

The livelihood programs through income generating activities are mostly provided by the local government in Java region. The local government of Lamongan through its social office for instance provides an income generating program for older people. The greater exposure of villages in Java to development programs further indicates the unequal development opportunities across rural Indonesia. Recent development programs, like the Pre-Employment Card (*Kartu Pra Kerja*), are also concentrated on Java. Kusumaningrum, Aidulsyah, and Meilianna (2020) reported that 70 percent of the beneficiaries of the Pre-Employment Card are located in Java. The Card is aimed to provide vocational training assistance to young workers who are seeking work, as well as unemployed workers and active workers who would like to improve their skill/competency. The program provides a non-cash voucher to support the training costs, ranging from 3 to 7 million rupiah per person that can be used within a year. Based on this, Javanese provinces are advantaged due to superior access to government policy and programs compared to provinces outside Java. Unequal development leads to inequality in the economic wellbeing of older people.

Village		Daughter		Son	
	%	Mean (IDR)	%	Mean (IDR)	
Gunung Sari (Balinese)	40.2	692,063	54.7	999,757	
Muara (Batak)	39.2	744,904	38.5	718,049	
Cacaban (Sundanese)	53.9	699,535	60.4	621,881	
Bugoharjo (Javanese)	74.4	1,022,459	70.9	960,860	
Rejoagung (Javanese)	55.7	859,813	58.0	991,483	

Table 6.6: The percentage of children who provide financial support and average financial support for the last 12 month by sex of the children (N: 6,148 children).

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Another possible explanation for variations in economic wellbeing by ethnicity is the bilateral kinship system of the Javanese. Kinship is a system that governs social interactions between people such as roles and responsibilities. Ethnicity depicts a kinship system that provides the basis for household, family recruitment, and sponsoring (Niehof 1995). This kinship system is manifested in the likelihood that a daughter might support (or not) her parents financially. The son in strong patriarchal communities such as Gunung Sari (Balinese) and Muara (Batak Toba) is significantly more likely to provide financial support to parents than a daughter (Table 6.6). Among 1,016 children in Gunung Sari village, just over 40 percent of the daughters provided financial support for their elderly parents in the previous 12 months, much lower than sons at 54.7 percent. The percentage of daughters who provide financial support for elderly parents in patrilineal communities (Gunung Sari and Muara) is lower than in bilateral

communities (Cacaban, Bugoharjo and Rejoagung). More than half of daughters in Cacaban and Rejoagung and two-thirds of daughters in Bugoharjo provide financial assistance to their elderly parents.

Table 6.7: The percentage of migrated children in big cities who send money for the development of home villages (N: 188 children)

Village	Often	Sometimes	Never
Gunung Sari (Balinese)	6.0	44.0	50.0
Muara (Batak)	0.0	7.3	92.7
Cacaban (Sundanese)	0.0	15.0	85.0
Bugoharjo (Javanese)	31.6	21.1	47.4
Rejoagung (Javanese)	4.6	11.4	84.1

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Moreover, ethnicity also provides a cultural context, which will include values and norms with regard to the elderly, the relationship between the old and the young and obligations and responsibilities toward older people (Niehof 1995). Javanese people have "guyub" ("peaceful togetherness"). The guyub norm operates through establishing "child migrant organizations" (paguyuban anak rantau) in the cities. These migrant organizations contribute to the development of the village. The paguyuban often collect funds raised from migrated children and sends them to needy people, who are often older persons in their home village. Table 6.7 shows the percentage of migrated children who send money for the development of their village. The children from the village of Bugoharjo (Javanese) show the highest percentage here.

The most common purpose of the contributions by the migrated children is to support the education of poor children, to support the health of the poor older people and to assist building a mosque or church. The head of Bugoharjo village commented:

Among the purposes of the migrated children's contributions is to assist the building of a mosque, costing around 2.5 billion rupiah. The mosque budget was without any government contribution and the mosque is not finished yet...in addition, there is a free ambulance program, and there is also assistance of around Rp 2 million for funeral expenses for persons who recently passed away. Moreover, there is also an assistance program for orphans as well as to support annual Islamic preaching. There are some child migration associations in the city, including Al-Ikhlas and Arrohmah. Contributions come from around 560 households spread in the greater Jakarta, Karawang and Bandung areas. Most of them work as street food sellers (Bugoharjo, 4/02/2017, M28LT).



Picture 6.7: Migrated children's contribution to a new mosque (photo taken on 6/2/2017)

The contributions of migrated children for village development in building mosques and churches and for other purposes can clearly be significant in some cases. The mosque building in Bugoharjo, for instance, was mostly contributed by migrated children. The mosque steering committee successfully collected around 2.5 billion Rupiah (around \$ 250,000) from migrated children. Picture 6.7 shows how sizeable and even luxurious the mosque is, that was largely financed by migrated children in the remote rural area of Lamongan District. The mosque is among the biggest and most opulent buildings within the village. The head of Rejogung also stated that the majority of funding for the village church was provided by migrated children.

6.3.1.4 Having disability

Model 1 at Table 6.5 (p. 173) describes that the elderly with a disability are facing a significantly higher likelihood of experiencing economic disadvantage. Model 1 shows that for the disabled, the odds of experiencing high economic disadvantage (versus medium, mild and no economic disadvantage categories) are 1.460 times higher than those who are not disabled. Likewise, for the disabled, the odds of combined categories of high and medium economic disadvantage (versus mild and no disadvantage) are 1.460 times higher for the disabled compared to those who are not disabled in the model. The disability might force older people to rely on financial support from their families, in turn increasing their vulnerability too. The case of Yono who is aged 80, bedridden and with chronic disease, illustrates the economic disadvantages experienced by the disabled elderly. Previously working as a farmer, he incurred his disability when he was 70 years old. He and the four other members of his family have a small amount of riceland which produced just enough for family consumption, so the rice was not sold on the

market. He cannot walk now, so that he can no longer work on his farm. He lives with his wife who is 88, a daughter, a son-in-law and a grandson. None of the adults in his family have regular income as both daughter and son-in-law are only seasonal workers. Based on this, he cannot rely on his daughter and son to support his daily needs. This case illustrates the situation of senior citizens in rural areas as their vulnerability rises with age as disability increases.

6.3.1.5 Receiving Beras Miskin-Raskin (rice for the poor) program

Model 1 and 2 Table 6.5 (p. 173) shows that clients of the *Beras Miskin-Raskin* (Rice for the Poor) program are more likely to report economic difficulties. Model 1 shows that for older persons who receive *Raskin*, the odds of experiencing high economic disadvantage versus medium, mild and no economic disadvantage categories are 2.187 times higher than those who are not receive *Raskin*. The program is part of a food security program targeting the poor. The need to access the *Raskin* program is one of the robust and consistent predictors of lower levels of economic wellbeing. Model two shows that those who receive the *Raskin* program have double the chance of facing economic hardship than older people who are outside the program. It can be explained by the fact that the *Raskin* program is designed to target poor families, so that's why the beneficiaries are older people who have economic disadvantages.

6.3.2 Protective factors

6.3.2.1 Having a pension

Pension provides income security in old age. Model 2 Table 6.5 (p. 173) shows that pensions have a strong association with economic well-being in among the older generation. Having a pension is a substantial protective factor against possible economic disadvantage in old age. For older persons who pension, the odds of experiencing high economic disadvantage versus medium, mild and no economic disadvantage categories are 0.283 times lower than those who are do not have pension. A pension can be used as a proxy for workforce participation in midlife. This finding confirms previous findings on the relationship between midlife characteristics and economic outcomes in old age. Using the 1968-1997 Panel Study of Income Dynamics, Vartanian and McNamara (2002) cited Choudhury (1997) and Quinn J. F. Quinn (1993) who found that midlife characteristics such as workforce participation, income, and rural residence were strongly associated with economic well-being in old age.

The qualitative interview also shows that a pension provides security in old age and is sufficient to fulfil the daily needs of most elderly persons. The case of Amir, a retired government officer in Muara aged 81 years is an example of the importance of a pension in old age. He stated:

My pension is sufficient, I retired in 1998 at grade 4A, in the past, before I started teaching I worked in my rice field, but now I just relax and walk around. I lived alone for around ten years after the death of my wife. I cook and go shopping by myself using my motorcycle (Muara, 16/03/2017, M44TD).

The case of Amir describes the importance of a pension for wellbeing. Amir feels relaxed and sees no need to work further as his pension suffices for his needs. A pension however is only provided for those who were in government employment or in some private companies. Amir has been retired for around 20 years and has been living alone for around 10. This is an example of independent living in old age which differs greatly from many other cases where the old lack the benefit of a pension. Similarly, Andi, a retired older man at the age of 81 who lives with his sick wife also maintained:

I am happy after my retirement, I have a pension, I feel secure, thank God. My pension fulfils the needs of the two of us. What we thinking now is how to be healthy and have a longer life, so I enjoy my pension. The additional work I am doing in the plantation is only to give me something to do and be active (Muara, 16/03/2017, M51TS).

The terms expressed by the elderly with pensions are "happy", "relaxed", "sufficient" and "feeling secure". The support system through the pension system for old age seems to be a successful strategic arrangement to keep retirees happy and to provide economic security in their old age. Feeling secure is an essential determinant of quality of life during old age. However, a large portion of the older generation is still not covered by current pension arrangements. The current pension system coverage is limited to former government officials, ex-armed forces personnel and about 25 percent of ex-formal sector labourers. Only about 12 percent of the total labour force is covered by current pension arrangements, and much of the formal sector and the entire informal sector is not covered (Muliati, 2013).

The elderly who do not have pensions often feel insecure about their old age. They often worry if they cannot meet their daily needs as they are poor, and their children are also poor. The case of Anah at the age of 64 years is an example of the suffering of economic hardship. She stated:

Sometimes I cry when I am cooking, I cook using firewood, I feel miserable, I feel tired of being nagged by my aunt, I cried in my heart, I cried truly crying...I worry, if one of my aunts die, who should I talk to, who will pay the cost for the funeral with our very limited budget, just to fulfil our daily needs is so difficult, to find a seasonal job is difficult and I am frail (Bugoharjo, 6/02/2017, F34LS).

Similarly, Mana, a woman of 74 experiences economic disadvantages. She lives alone and relies on financial support from her daughter and grandchildren. She stated:

Being elderly brings a lot of sadness, I am poor, if I am cooking, I am using wood, if there is no wood, it becomes more difficult for me. I am looking for firewood in the plantation, as I do not have a stove and LPG gas, If I had LPG gas, how would that be possible, where I can I get the money to buy gas? (Cacaban, 19/02/2017, F19SI).

The two cases illustrate the suffering caused by income that is inadequate to fulfil daily needs for the old who lack regular income and pensions. The case of Anah who take care of her two sick aunts describes the worries caused by inability to finance the future funerals of her two aunts. In the Javanese cultural context, the funeral cost is very expensive as the family have the social duty of conducting seven days of praying ceremonies (*tahlilan*) and community members must be invited to participate. Providing appropriate food for the guests in the praying ceremony is costly. To fulfil daily needs only is difficult enough, and she foresaw enormous difficulty in financing one or even two expensive funerals. The cases of Mana and Anah also describe the economic disadvantages experienced by elderly women while the cases of Andi and Amir illustrate the better economic conditions of men.

Considering the increase in the ageing population, the high rates of poverty among the older generation and the low pension coverage, *social pensions* that complement formal (contributory) pensions need to be introduced. Indonesia has shown a strong commitment through a variety of social welfare laws such as the national security law (SJSN) that attempts to provide income support in old age. However, the current welfare reforms are aimed to provide income support for the future older generation, or those currently of working age who will retire over the next 15-40 years (Priebe & Howell, 2014). Therefore, there is a clear need to address the pension requirements of the current elderly population.

To address the issue of old-age poverty in the context of the present low coverage of the formal pension system, many countries have introduced social pensions complementing formal pension programs by providing income support to the elderly. Thailand, for instance, introduced non-contributory old age allowances in 2009 and reached universal coverage soon afterwards. Thailand's pension system has continuously developed various schemes for government officers, private sector workers and also informal economy workers. The non-contributory allowance can be complemented by an additional scheme such as national saving funds aimed to provide more comprehensive old age protection. Poverty among the elderly has fallen due to increased pension coverage (Canonge & De, 2019).

Trinidad and Tobago also introduced a universal pension and care for the elderly. Old age pensions employ a rights-based approach. The government of Trinidad and Tobago provides a comprehensive set of services for older people aimed to manage various risks associated with old age including contributory and non-contributory pension schemes, free health care, provision of selected drugs free of charge, social support mechanisms, free public transportation, subsidized housing programs and care services (Gangapersad & Pino, 2019).

In Indonesia, the Ministry of Social Affairs introduced the *Aslut* program in 2006 to respond to the low coverage of formal pension schemes. *Aslut* provides social assistance in the form of cash benefits of around IDR 200,000 (roughly AUD200) per month to the poor elderly who are considered neglected and without any means of self-support. This program is a strategic program for fighting poverty in old age. However, the program's coverage is too small at 0.2 percent of all elderly people, and less than 1.5 percent of this cohort in Indonesia compared with the total estimated number of 2.5 million poor elderly (the detail of social welfare programs for the elderly will be elaborated in Chapter 7).

The average monthly basic needs expenditure of the elderly is assessed at IDR 357,786 (around AUD36), which is close to the poverty line at the district and provincial level. The poverty line of Buleleng District in 2016, for instance, was IDR 350,902 and Tapanuli Utara district at IDR 325,606. Allocating IDR 200,000 a month to all the poor elderly or to all those with chronic disease or disabilities (this was estimated at about 400,000 people based on PPLS data - social protection program data in 2011) is a strategic solution to provide income and reduce poverty in old age and provide a decent life for the elderly.

6.3.2.2 Having higher education

Model 1 and 2 Table 6.5 (p. 173) assumed that having higher education is a substantial protective factor against possible economic disadvantage in old age. For those who completed secondary and upper education, the odds of experiencing high economic disadvantage versus medium, mild and no economic disadvantage categories are 0.376 times lower than those who had no education or less than primary school education. Similarly, for those who completed primary education, the odds of experiencing high economic disadvantage versus medium, mild and no economic disadvantage categories are 0.656 times lower than those who had no education or less than primary school education. Better educated senior citizens can enjoy fruitful employment opportunities that in turn provide them with higher income levels and better economic well-being in their old age. In contrast, lack of education is likely to diminish employment prospects resulting in lower earnings and assets. Lower earnings and assets in turn contribute to eventual lower economic wellbeing in old age.

6.3.2.3 Having farmland

Models 1 and 2 Table 6.5 (p. 173) demonstrate that the elderly who own farmland are much more likely to enjoy better economic outcomes than those elderly who lack this asset. Models 1 and 2 show a significant association between land ownership and economic disadvantage.

Model 2 shows that for those who own farmland, the odds of experiencing high economic disadvantage versus medium, mild and no economic disadvantage categories are 0.555 times lower than those who lack this asset. The significant association is partly caused by the fact that in agricultural areas, farmland is one of the most significant assets, providing useful income for older people. Having farmland is also a symbol of success for migrated children. A local leader in Bugoharjo, for instance, named two main criteria of success for children working in the city. The first is if they can repair the house of their parents, and the second is if they can buy farmland for them (Bugoharjo, 4/02/2017, M31LT).

6.3.2.4 Remaining economically active

Table 6.5 (p. 173) shows that still economically active elderly is a significant protective factor against possible economic disadvantage in old age. Model 2 describes that for those elderly who still economically active, the odds of experiencing high economic disadvantage versus medium, mild and no economic disadvantage categories are 0.592 times lower than those who do not work or cannot work. Work has a strong association with income. Like most developing countries, a significant number of the older generation in Indonesia feel the need to maintain income-earning activities to meet basic needs. Many seek to avoid relying on financial support from children. Besides keeping themselves active, working is their strategy for independence and the retention of earning capacity.

6.4 How to improve?

The increasing number of older persons, the increasing incidence of poverty by increasing age and the limited role of financial support from children need to be considered in order to develop income security in old age. How to improve financial condition of the older generation in rural areas? Firstly, pension reform and old-age saving are among the possible strategic solutions which can provide income support for the elderly. The previous section demonstrates that pensions are one of the most influential protective factors in guaranteeing incomes and preventing old-age poverty. Pensions also make significant contributions to family networks. If Indonesia is to develop more comprehensive social protection measures for vulnerable groups, pensions may be an effective strategy as they work not only to provide security to the older generation but also to their families. The SJSN law (National Social Security System Law) was enacted in 2004 and created five national social security programs - a health program and four employment programs including work accident, old-age savings, pension and death benefits. However, the old-age saving program that should be very beneficial for older people has not been implemented yet, and there is no significant reform and change in the pension scheme. The current pension system in Indonesia is fragmented and varies by labour market group, including former government officials, former armed forces personnel and former workers in the formal business sector. Up to now there is no existing pension system for informal sectors though the informal sector as a whole in fact represents the major body of workers in Indonesia.

The high incidence of poverty among the elderly needs to engender a broadening of the scope of formal pensions into a social pension to cover those who lack access to any social protection in old age. A social pension would not be based on the contributions of individual workers. It would be non-contributory and would normally be funded by the government and provide a flat-rate benefit. The social pension is usually designed to redistribute income across population groups with the aim of reducing poverty among the older generation (Kohli & Arza, 2011). To avoid such a pension becoming too much of a burden on the budget, means-testing would be a good option for all citizens who are elderly or elderly and disabled. Thailand might be a good example of a country that succeeded in expanding pensions through the implementation of a non-contributory old-age allowance. In Thailand, poverty among the elderly has fallen, and this can be primarily attributed to increased pension coverage (Gangapersad & Pino, 2019).

Secondly, the promotion of a continued economically active elder generation can also be a strategic approach in reducing the risks of poverty among them and limiting possible financial dependence on others. Therefore, improving the quality of work in later life is also important as many of the elderly continue to work. The literature notes that agriculture is a hazardous industry if it fails to follow occupational health and safety rules. Agricultural work can be physically demanding, seasonally exhaustive, and sometimes the repetitive nature of work can cause a range of health problems. Working in the agricultural sector also may involve exposure to potentially dangerous machinery, vehicles, chemicals, livestock, and exposure to the extremes of weather, noise and dust. Providing occupational safety and health guidance and training for older persons is also essential to protect them from hazards associated with employment. If they work in hazardous conditions, adverse health issues can arise that in turn increase health expenditure while damaging their economic well-being. Workplace policies also should be restructured to allow people to work longer, extending the effective retirement age for those who are still productive; this is also essential to maintain and guarantee productive and active ageing. The retirement age extension is also contextual due to increasing life expectancy.

Thirdly, a poverty alleviation program should prioritize those older persons with little or no income, with disability and illness, and no children. In selecting program beneficiaries, it is also important to consider those of advanced age, i.e., of 70 and over. The economic empowerment program is also essential for productive older persons. A significant number of older persons are self-employed who need technical and financial assistance to develop their business.

6.5 Conclusion

This chapter's aim is to compare the economic behaviour of older persons across gender and region, factors contributing to the level of the economic well-being of older persons and the influence of children's financial support in relieving old-age poverty. The majority of older people are still active economically in the labour force. A high percentage at 61.8 percent of older people surveyed (75.1 percent of men and 48.2 percent of women) over age 60 considered themselves to be working during the survey. The economic behaviour of this cohort varies by gender, social class and region. The wealthier social class is more likely to work to keep themselves active and avoid disease, while the poorer social class continued to work to survive and to contribute to family needs. The type of work also varies by gender and region. Elderly men are more likely than older women to remain in work. There is also a division of work among men and women in which women are more likely to work in the market place, home industries, complementing farm earnings and in production such as weaving, making woven mats and food processing, while the men are more likely to work in jobs needing physical activities such as fish ponds, coconut farms and furniture making. The men tend to enjoy more sources of income than the women. As a result, older men have significantly higher mean income from all sources than older women. This strongly suggests an income inequality between men and women. This inequality often places older women in a more vulnerable situation. The strategy in seeking a job also varies by gender where women tend to use religious activity and men tend to seek contacts in the coffee shops. In addition to gender, the types of occupation also vary by region or location. The variation in type of work is influenced by different available resources and the particular environments surrounding older people.

This chapter demonstrates that the interconnectedness among family, education, employment and welfare systems is a significant factor influencing the level of older people's economic wellbeing. The percentage of poverty among them is high (40 percent), particularly when using household income indicators calculated by summing up all household income and dividing this figure by the number of persons living in the household adjusted by the poverty line in each district. In addition to household income measures, another measure is the material deprivation measure. Deprivation measures indicated around 12 percent of older persons are poor. Risk factors of economic disadvantage among elderly people include being female, having non-migrant children only, having no children, belonging to a non-Javanese ethnic group and having disability. One of the reasons why non-Javanese older people were more likely to report economic disadvantage is that daughters in patrilineal communities. The adult children who migrated from Javanese villages also were more likely to send money for village development. Another reason is that older people in non-Javanese villages are less likely to

exposed to social protection and empowerment programs. Protective factors against possible economic disadvantage include having pensions, a higher education level, owning farmland and remaining economically active.

The role of children's financial support is very limited in preventing poverty and as a main source of income in old age. The children are less likely to provide significant financial assistance to aging parents who have regular or high personal income. Those who are more likely to work are also more likely to suffer from decreasing amounts of financial support from children. Therefore, there is a need not to rely on children's support for older persons but to develop and provide a more appropriate support system. Pension reform and old-age saving systems are among the types of strategic support systems capable of providing income support for the elderly. Improving the quality of work in later life is also important, as many of the elderly are still working in physically demanding, seasonally exhaustive, and sometimes repetitive work which can cause a range of health problems. The retirement age extension is also contextual due to increasing life expectancy. Poverty alleviation programs should prioritize those older persons with little or no income, with disability and illness, the "super-old", those never married and those without children. Chapter 7 will elaborate in more detail on this cohort's extent of access to existing social support.

Chapter 7 - Social Welfare for Elderly Policy at Crossroads: Inequality in Accessing Social Welfare Programs for Older People

7.1 Introduction

OECD (2019) reported that poverty is concentrated among the elderly and rural people. Poverty and lack of support systems which would enable older people to live in dignity are among the most serious difficulties. When the support systems from family, community and government are not in place, older persons experience hardship, in some cases extreme hardship. The increasing number of the elderly and a lack of support systems lead to an increasing need for formal and comprehensive old age security. This chapter will analyse how and in what way government has supported elderly persons. It also examines the extent of access of the older generation to the components of those government programs, particularly how age, gender, region and social class relate to the experience of exclusion in later life among a diverse group of rural-dwelling older people. Up to now, we have little knowledge of the social welfare programs for the elderly and their experience of attempting to access their social rights to government services. This chapter also outlines the challenges of implementing the programs and opportunities to improve service quality.

In recent years, the public debate on social inequality in relation to gender, age, region and social class returned in all its intensity. Social inequalities include differences in income, resources, power and status within and between societies. Social inequality refers to the unequal distribution of life chances and opportunities among different people and groups (Binelli, Loveless et al. 2015). In this chapter, social inequality refers to social exclusion. By social exclusion, I mean the dangers and risks encountered by the older generation in claiming and using their rights of social citizenship "including equal access to the labour market, to education, to health care, to the judicial system, to rights and to decision-making and participation" (Jehoel-Gijsbers & Vrooman, 2008, p. 3).

This chapter focuses the discussion on access to social rights on social welfare programs for the elderly. Inadequate access to government services ('social rights') consists of a wide diversity of domains, including inadequate access to health care, housing, social services, and social security. Access to quality services such as healthcare and social services in old age remains a major concern for the majority of the ageing population in Indonesia. Access to social rights is operationalised by enrolment or participation in social services for older persons.

This chapter is structured around the following five areas: the government institutions implementing services to older people; types and approaches of social welfare programs for the elderly; the distribution of older persons who are enrolled in specific services; factors determining their access to social rights; inequalities of

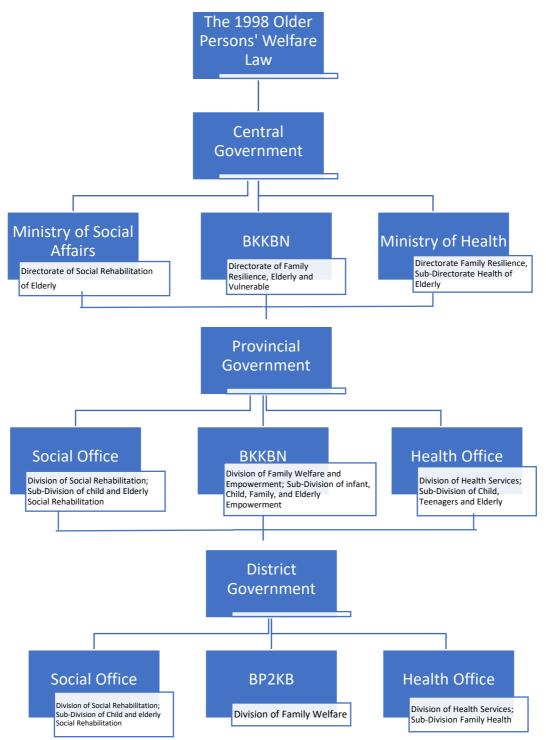
accessing social welfare programs for the elderly by gender, social class and regions; and recommendations to improve social services.

7.2 Government institutions providing services for older persons

Important legislation on the elderly includes: the 1965 Provision of Assistance For Frail Older Persons; the 1992 Workers Social Security Law; the 1998 Older Persons' Welfare Law; the 1999 Human Rights Law; the 2004 Social Security Law; the 43/2004 Government Regulation on The Implementation of Efforts to Improve Older Persons' Welfare; the 52/2004 Presidential Decree On the National Commission For Older Persons; the 2009 Health Law; and the 2013 Social Security Agency Law. This legislation became the basis for implementation of social welfare programs for older people in Indonesia. In the implementation of the legislation, three major government institutions provide services for older persons, namely the Ministry of Social Affairs, the Ministry of Health, and the National Population and Family Planning Board (BKKBN). Figure 7.1 describes the hierarchy through which services for older people are provided, from central to local government. Central government institutions usually initiate programs or services for older people by coordinating with provincial governments and through implementation by local government. The decentralization policy which was implemented since 2001 gave greater autonomy and enhanced roles for local government in the provision of services (Mahi, 2010).

Figure 7.1 indicates that the Ministry of Social Affairs is the only institution which includes a special directorate for older persons. The name of the directorate is *Direktorat Rehabilitasi Sosial Lanjut Usia (Directorate of Social Rehabilitation of Older Persons).* Other institutions include the elderly with other groups such as children or other vulnerable groups. For instance, the BKKBN subsume older persons in one of their directorates, *Direktorat Bina Ketahanan Keluarga, Lanjut Usia dan Rentan (Directorate of Family Resilience, older persons and Vulnerable Groups).* Other institutions such as the Ministry of Health place older persons under a sub-directorate. Including older persons in a special directorate in administrative government institutions indicates the possibility of higher priority, larger funding and a larger number of programs. Therefore, the National Commission for Older Persons (Komisi Nasional Lanjut Usia-Komnas Lansia) in Indonesia was led by the Ministry of Social Affairs.

Figure 7.1: Structure of intergovernmental institutions in providing Services for older persons



The National Commission for Older Persons consists of multi-government institutions, universities and non-government bodies responsible for providing recommendations and consideration in developing policy on the improvement of older persons' welfare, as well as assisting the president in coordinating implementation efforts to increase social welfare (Presidential Decree No. 52/2004). At the province and district level, Commissions on Older

Persons were also established. However, not all provinces and cities/municipalities in Indonesia have established committees that are consistent with the national strategy.

7.3 Types and approach of social welfare programs for elderly from the government

The government of Indonesia has made efforts to promote the well-being and fulfil the social rights of the elderly through social welfare programs that can be clustered into five groups including social assistance, social insurance, health services, empowerment, and awareness raising. The first cluster is the social assistance program. Social assistance is a non-contributory program targeted at poor people and other vulnerable groups such as the elderly and the disabled. Social assistance for the elderly is aimed to fulfil their basic needs, to decrease their life burdens and to enhance the quality of life of the poor. Social assistance is the most extensive program directly targeted to older persons of low-income families in the form of in-kind and cash transfers.

There are two main programs of social assistance using cash transfers or social pensions: the Family Hope Program for the Elderly (Program Keluarga Harapan Lansia-PKH Lansia) and Social Assistance for the Elderly (Asistensi Sosial Lanjut Usia-Aslut). Both programs provide a cash transfer to older persons who are living in poverty in order to meet their basic consumption needs and to maintain their wellbeing at around IDR 200,000 (\$20) each month for selected recipients. The payments are used to assist them in obtaining food, nutrition, transportation, social participation, funeral and similar expenditures. The beneficiaries and eligibility requirements of both programs are different. The Family Hope Program for the Elderly is provided to the poor elderly (aged 70 and over) while the Aslut program is provided for those who are poor, neglected, or bedridden or disabled. In selecting the beneficiaries, PKH Lansia uses a top-down approach in which the central government determines eligibility through the criteria determined by the Unified Database (UDB), a common targeting instrument for all social assistance programmes that links beneficiaries to complementary interventions (OECD, 2019). The Aslut program employs a bottom-up approach that relies on social workers to identify the older persons who need assistance. Social workers propose those eligible to receive Aslut and the Social Office at the district level decides Aslut beneficiaries based on their quota. Most districts are allocated 50 quotas for the Aslut program, which is usually very small compared with the actual needs. The Social Assistance for the Elderly program reached 26,500 older persons across Indonesia and the PKH (including children, mothers and older persons) reached 10 million households in 2018 (OECD, 2019).

Social assistance programs in the form of an in-kind approach include home care and food vouchers or non-cash food assistance (*Permakanan*). Both programs are central

government programs implemented by the Ministry of Social Affairs. The home care program is a caring program where a social worker makes regular visits to identify the physical needs of the elderly and to provide support to the clients and their families. *Permakanan* is the term used by the Social Office for the food assistance program. The distribution of the *Permakanan* program is mostly conducted once a year in the form of rice, oil, sugar and instant noodles.

The Indonesian government also provides aged care or nursing homes for neglected and poor older persons. The aged care program attempts to fulfil clients' basic needs such as shelter, food, healthcare, recreation, counselling, vocational training and religious activities. Another social assistance program which is indirectly beneficial for older persons is Rice for The Poor (*Rastra formerly Beras Miskin-Raskin* - this chapter continues to use the term "*Raskin*" as during data collection the name of the program was *Raskin*). *Beras Miskin-Raskin* is the largest social assistance program providing subsidized rice for the poor that is likely to be beneficial for those elderly people living in a poor household. It was introduced in 1998 to reduce the impact of the rise in food prices following the Asian Financial Crisis, by reducing the burden on household food expenditure and stabilising the price of rice. *Beras Miskin-Raskin* is a crucial component of social protection policy, especially in Indonesia, where there is still widespread evidence of poor nutrition, and where the poor still spend around 25 percent of their total expenditure on rice.

The second approach of the social welfare programs for the elderly is social insurance. Social insurance benefits are related to employment status and contributions paid (Gough, Bradshaw, Ditch, Eardley, & Whiteford, 1997). Social insurance employs a contributory mechanism implemented through the National Health Insurance program (*Jaminan Kesehatan Nasional-JKN*) and pension. The National Health Insurance system includes both the National Social Security Agency (*BPJS – Badan Penyelenggaran Jaminan Social*) and the Healthy Indonesia Card (*Kartu Indonesia Sehat-KIS*). In 2014, the Indonesian government integrated a fragmented health insurance scheme into a single national insurance scheme, *Jaminan Kesehatan Nasional* (JKN), implemented by the newly formed national social security agency, *Badan Penyelenggara Jaminan Sosial Kesehatan - BPJS Kesehatan*.

National Health Insurance employs a universal approach in that it applies to all Indonesian citizens. A universal approach to identifying recipients of social protection schemes is very simple as everyone within the population is eligible for the scheme. A universal approach is common in health programmes, which indirectly are of course likely to be beneficial for older persons and their families. As of October 2018, 203 million people, or three quarters of the population, were covered by JKN (OECD, 2019). It indicates that the program is being rolled out in stages, and hasn't yet reached everyone. The universal scheme is part of the *Sistem Jaminan Sosial Nasional*-SJSN (National Social Security System), which is mandated by Law No. 40/2004. Among key features of the law is that it mandates the creation

of several social security schemes for Indonesian citizens including an old age pension, old age savings, National Health Insurance, work-injury insurance, and death benefits. The law requires that the JKN premium of the poor is paid for by the Government through the *Penerima Bantuan luran* - PBI (Premium Assistance Recipients) program. On the other hand, the pension is only provided to a relatively small population of retired civil servants, former police, former armed forces and former workers in formal business sectors, as the pension system still employs contributory schemes. The universal old age pension and old age savings programs as mandated by the law of the National Social Security Law (2004) are not implemented yet.

The third cluster is the provision of health services. Health services are operated from the village up to higher levels of government. The health services in the village level are provided through *Polindes* (village health services) managed by a midwife. The midwife is also responsible for managing the *Posyandu Lansia-Poslansia* (integrated health service posts for elderly) or *Posbindu (Pos Binaan Terpadu)*, a community-based program aimed at improving the health status of older adults at the village level. *Poslansia* offers health examinations and provides simple laboratory tests for older persons. These activities are under the supervision of the local *Puskesmas* (Community Health Centre) (Kadar, 2013). Other services offered in *Poslansia* include specific physical exercise programs for the elderly, as well as distributing healthy food and vitamins for them. *Poslansia/Posbindu* employs a community-based approach inviting the participation of local communities. A midwife is assisted by health cadres in running health services through the *Poslansia/Posbindu*.

At the sub-district or suburb level, the health services provided to the elderly include a community health centre (*Puskesmas*) and an "elderly friendly community health centre" (*Puskesmas Santun Lansia*). The difference between the two is that the *Puskesmas Santun Lansia* employs the principle of a friendly environment for the elderly. The *Puskesmas Santun Lansia* was designed to address some problems related to the physical infrastructure of health care settings which are not always well matched to older people's needs, such as a lack of accessible toilets and long waiting lines. At the higher levels (district and provincial), health services are provided in hospitals and some hospitals contain geriatric clinics (*Poli Geriatri*) based on an elderly-friendly environment. Another provision of health services that is likely beneficial to seniors is *Prolanis - Program Pengelolaan Penyakit Kronis* (Management of Chronic Disease Program). This program is provided to people with chronic diseases, particularly high blood pressure and diabetes. It provides a series of activities including health consultations, home visits and an education club.

The fourth approach is empowerment aimed at increasing the poor's income and their welfare. The 1998 Law on the Welfare of the Elderly divides the elderly into two groups, including the productive or healthy elderly and non-productive elderly. Empowerment

programs are provided for the productive elderly. Empowerment programs are mostly conducted by the Ministry of Social Affairs or the Social Office at the district level. As part of the empowerment program, clients are provided with vocational training and funding after the training. Another activity of the empowerment program is the provision of livestock such as goats to improve clients' welfare. A further empowerment program for older persons is *Karang Werdha*, a community-based older person's association at the village level aimed to further enhance their welfare. This program is a unique one implemented by the Local Government (for instance the local government of East Java) provides an annual fund of around six million Rupiah for each *Karang Werdha* in each village. The fund is used to run religious, economic and health activities based on local needs.

The last approach comprises awareness-raising programs aimed at increasing both the awareness and the capacity of older persons' stakeholders, particularly their families, in fulfilling the rights of the elderly. Two main programs use this approach, including the national day for the elderly (*Hari Lanjut Usia-Halun*), and *Bina Keluarga Lansia-BKL (Empowerment program for families of the elderly)*. *Hari Lanjut Usia-Halun* is conducted on 29 May every year campaigning for the fulfilment on the rights of the elderly. Besides campaigning for these rights, activities include healthy gymnastics, older person idols (exemplary senior citizens) and free medical check-ups. Another program using the awareness-raising approach is *Bina Keluarga Lansia-BKL*, which seeks to advocate and strengthen the role of the family in caring for the elderly.

Table 7.1 describes that most government programmes for older persons implemented at the local level are initiated and run by the central government. Only a small number of programs are initiated and implemented by local governments. This might indicate a lack of concern at the local government level to promote the wellbeing of the older generation through social policy. Mahi (2010) argues that the delegation of increased responsibility and authority of public services to local governments has not made a significant contribution to the improvement of local welfare. OECD (2019) also reported that only a few local governments have their own social protection programs.

Program	Design	Eligibility Criteria	Leading Sector	Coverage
Social Assistance Cl	uster			
Social Assistance for Elderly (<i>Aslut</i>)	Provision of cash transfer of IDR 200,000 per person per month (direct	Poor individuals over age 60 who are ill and require assistance or are neglected	Ministry of Social Affairs (Central Government)	26,500 older persons- 2015

Table 7.1: The matrix of social welfare programs for the elderly by clu	uster
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Program	Design	Eligibility Criteria	Leading Sector	Coverage
	services to older persons)			
The Family Hope Program for the elderly (<i>PKH Lansia</i>)	Provision of cash transfer of IDR 200,000 per person per month or IDR 1,890,000 per household per year (direct services to older persons)	 Poor elderly The elderly aged 70+ Having a care provider 	Ministry of Social Affairs (Central Government)	10 million Poor households (including children, expectant mothers and elderly)- 2019
Home care	Caring program by social workers at home basis (direct services to older persons)	 Poor elderly Bed ridden/ disabled older people 	Ministry of Social Affairs (Central Government)	14,000 Older Persons - 2015
Aged care (nursing home)	Provision of nursing homes provided for independent neglected poor older persons	 Older person from poor household Independent older persons (being able to do self-care) 	Ministry of Social Affairs (Central Government) and Social Office of local government (Provincial/State Government)	278 nursing homes
Non-cash food assistance/ food voucher (<i>Permakanan</i>)	In-kind assistance to poor elderly (direct services to older persons)	Poor older persons	Ministry of Social Affairs and District Social Office	Varies across districts
Raskin (Rice for the poor)	Sale of subsidized rice to poor household (Indirect services to older persons)	Below poverty line	Coordinating Ministry for Social Welfare and Ministry of Social Affiairs	17.5 million poor households – as at 2011
Social Insurance	Netlessel O selet		Netion - LO	A 11
National Health Insurance	National Social Security Agency (Indirect services to older persons)	Universal (all Indonesian citizens)	National Social Security Agency and Ministry of Health	All Indonesian Citizens (203 million people in 2018)
Pension	Cash transfer (direct services to older persons)	Retired civil servant, police, army and formal sectors	PT Taspen, BPJS LAbour, PT Asabri	8 percent of all older persons

Program	Design	Eligibility Criteria	Leading Sector	Coverage
Provision of Health S	ervices Cluster			
<i>Polindes</i> , Pustu, <i>Puskesmas</i> and hospitals	The health centre from village to higher level	Universal	Ministry of Health	Universal
Poslansia/Posbindu	A community- based program aimed to improve the health status of older adults (direct services to older persons)	The person at the age of 45 and over	Ministry of Health	83,442 groups of <i>Poslansia</i>
<i>Puskesling</i> (Mobile Health Services)	Onsite health services	The whole population particularly the elderly people	Puskesmas	Universal to all people in the village/sub- village level
Puskesmas Santun Lansia	Community health services employing old age friendly environment (direct services to older persons)	Universal to all sick older persons	Ministry of Health	824 <i>Puskesmas</i> across Indonesia
Geriatric clinic	Specific clinic in hospital for older persons (direct services to older persons)	Universal to all sick older persons in the catchment areas of the hospitals involved	Ministry of Health	10 hospitals across Indonesia
Prolanis-Program Pengelolaan Penyakit Kronis (Management of chronic disease program)	The provision of health consultation, home visit and education club (direct services to older persons)	The people who have chronic disease particularly diabetes and hypertension	BPJS and Ministry of Health	Universal to all people who have chronic disease
Empowerment Cluste				
Karang Werdha	A community based older persons' association aimed at enhancing welfare (direct services to older persons)	Older persons at village level	Local Government Social Office	143 groups in Jember District

Program	Design	Eligibility Criteria	Leading Sector	Coverage
Vocational training and start business support	Providing training and funds to the poor productive elderly and families, to improve their capacity and income (direct services to older persons)	Poor but productive older persons	Ministry of Social Affairs and Local Government Social Office	Varied across districts
Advocacy Cluster		I	l	
Bina keluarga lansia-BKL (<i>Empowerment</i> <i>program for</i> <i>families with</i> <i>elderly</i>)	Developing toolkits, campaign and awareness raising on the fulfilment on the rights of older persons to communities particularly older persons' carers or family (Indirect services to older persons)	Household that has older persons	National Population and Family Planning Board	Universal to households with older persons
<i>Halun</i> -Older people day	Campaign, awareness raising, free medical check- up (Direct services to older persons)	Universal to all older persons	Social Office of Local Government	Universal

Source: Interview with Government institutions and various published resources

7.4 The distribution of older persons who are enrolled in services: small coverage/scale, underfunded and neglected?

The previous section described the very comprehensive social welfare programs for older persons implemented by multi-government institutions. Much progress has been made in terms of national policy commitment to provide services to the elderly, but the distribution and the coverage of those programs are very small in scope (Figure 7.2). Due to data limitation in analysing the distribution and coverage of all the services described in Table 7.1 in the quantitative analysis, this chapter focuses on five services that can be beneficial for older persons including health insurance, pensions, *Poslansia, Raskin* and *Aslut*.

Figure 7.2 describes the percentage of older persons who receive social welfare services. The distribution is based on the enrolment of all clients of those programs to identify the access of all older people on those programs. In multivariate analysis, all older persons are included in the model as health insurance, and *Poslansia* program employs a universal approach. Although pension and *Raskin* are eligible for specific groups such as *Raskin* is provided for poor household, in practice, medium and high-income families are also benefited from the program, as discussed in section 7.2. Pension is also provided for retired civil servant, police, army and some formal sectors, however after the recipients of pension passed away, their spouse is eligible for a pension. Therefore, in multivariate analysis, all older persons are included in the model. Including all older persons in the analysis is also aimed to examine who have access to the services and investigating the targeting system which is found in the previous research (such as McCarthy and Sumarto, 2018) on poor targeting on the implementation of social assistance program.

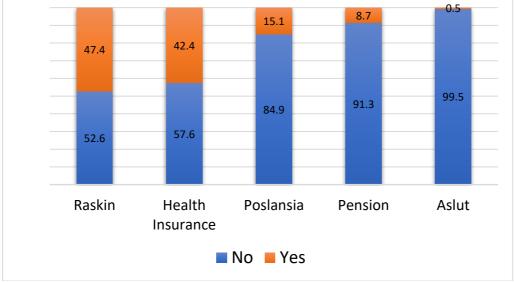


Figure 7.2: The percentage of older persons who receive government services

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Figure 7.2 describes the relatively small coverage of social services for older persons. The figure describes that *Raskin* (47.4 percent) has the largest number of beneficiaries compared to other programs and *Aslut* (0.5 percent) has the smallest. The small coverage of *Aslut* might reflect the small coverage at the national level as nationally it only covers 26,500 older persons while the number of neglected older persons in all Indonesia was around 2,8 million in 2010 (Jakarta, 17/10/2015, M133JS). Less than half of older people (42.4 percent) are enrolled in the National Health Insurance and just over 15 percent participate in the *Poslansia* program. Based on IFLS data, Johar and Maruyama (2011) found that only a quarter of older persons had health insurance in 2007, though it can be assumed that the coverage of

health insurance is increasing by comparing the ARIS and IFLS surveys. However, the percentage of older persons enrolled in health insurance might be considered low in rural areas, due to the fact that the target of JKN was to achieve 95 percent of the Indonesian population by 2019. The percentage of enrolment is also low, compared with the percentage of older persons who have one or more chronic disease, at 67.5 percent. Moreover, the percentage of older persons who receive a pension is very low at just under 9 percent. The Central Bureau of Statistics-BPS (2011) reported that the pension system only caters for workers in formal sectors that employed under one third (32 percent) of the workforce of 108 million in 2010. The low coverage of those programs might represent the low coverage at the national level as the percentages of program beneficiaries are relatively similar. For instance, the coverage of the pension program nationally was 8 percent and of Aslut was 0.2 percent (Priebe & Howell, 2014) which were very similar to the project sites (pension 8.7 percent and Aslut 0.5 percent). Older people in the future might have a low pension coverage as shown by the Transition to Adulthood Longitudinal Survey in Greater Jakarta where only 17.3 percent of young adults were members of pension schemes in 2010 (Transition to Adulthood Longitudinal Survey, 2010). If greater Jakarta as the capital city and the centre of government and industries contains only a small proportion of young workers who are members of pension schemes, the rural areas might cover an even smaller proportion as most of the working sectors there are in agriculture. The small coverage would become a serious issue if the support systems for the increasing ageing population are not seriously upgraded immediately.

Schmitt and Chadwick (2014) maintain that Indonesia spends much less on old age pensions than Thailand and Vietnam; the latter two countries spend between 37 and 49 percent of their total social protection public expenditure on income security for older persons. The low proportion of older persons in Indonesia who are enrolled in the pension system might indicate that the majority are vulnerable to old age poverty as many of them have no pensions or savings to finance their old age. At the same time, older persons will have much less likelihood than now of relying on assistance from their children or other family members, since fertility levels are declining and family relations are becoming more strained due to modernization and social change.

One of the main problems causing the minimal social security coverage for older persons is that two-thirds of the labour force is concentrated in the informal sector. "Informal" work and social exclusion are closely correlated. These two-thirds are usually not covered by any formal pension and health insurance schemes. This means that over 73-million people will potentially face poverty upon their retirement, when their ability to work diminishes, and consequently their income from work declines. Pension systems were introduced to combat social exclusion. Pensions have to "ensure that elderly people are not placed at risk of social exclusion; that they can enjoy a decent standard of living, that they share in the economic and social wellbeing of their country, and can accordingly participate in public, social and cultural life" (CEPS, 2004, p. 58) cited by Jehoel-Gijsbers and Vrooman (2008).

The small coverage of social welfare programs for the elderly is also caused by the lack of funding allocated for social protection programs. In 2017, the total investment of Indonesia's social protection system was 0.73 percent of GDP, and the social protection program for the elderly (and disability) was only 0.001 percent of GDP. The spending is very low relative to GDP (much lower than 1 percent). It is less than expected for a middle-income country like Indonesia, resulting in major gaps in coverage. Other countries, such as Nepal, have a much lower GDP than Indonesia but invest approximately 2 percent of GDP on social protection (TNP2K, 2018). The World Bank (2004) insisted that spending very little on the poor is an indicator of failed services. Social protection is relatively expensive and needs adequate policy design and sufficient funds, presenting a serious challenge to low-income countries. The mean cost of a basic package of social protection including a universal pension covering old age, disability and a child benefit, would amount to about two to three percent of GDP (Barrientos & Hulme, 2008).

The Indonesian Expenditures of Ministry of Finance reported that the proportion of social spending on welfare for the old is very low at around 2.4 percent of the total social protection spending in 2011 and that it dropped significantly to 1.7 percent by 2014. This proportion is much lower than spending on research for social protection which stood at 5.3 percent of the total social protection spending in 2011 and 2.3 percent in 2014 (Indonesian Expenditures of Ministry of Finance Report 2011 and 2014).

The underfunding was also reflected in the amounts allocated to the ministries responsible for providing services for the elderly. The allocation for *Aslut* in the Ministry of Social Affairs, for instance, was just 0.53 percent of the central budget's social assistance pool. It indicates that a large number of older persons are excluded from any old age pension through either insurance or assistance (Adioetomo, Howell, McPherson, & Priebe, 2013). Another example is the budget for the *Directorate of Family Resilience, older persons and Vulnerable Groups* in the *National Population and Family Planning Board (BKKBN)*, which was only IDR 7 billion. This funding was allocated for one directorate. It means the funding should be separated from other purposes such as for family resilience and other vulnerable groups. The allocated budget for older persons in the directorate was mostly used for training, advocacy and developing materials such as books and tool kits to promote the wellbeing of the elderly. A staff of BKKBN stated:

Our obstacle is also funding ...the different approach between the Ministry of Social Office and our institutions is that the Ministry of Social Affairs provides direct cash transfers to the elderly, while the funding from our institutions is used for advocacy. The seven billion Rupiah of our budget in a year is used for training and training of

trainers. Recently we have been developing BKL kits using a participative method through games to maintain the cognitive health of the elderly. The funding does not reach the villages (Jakarta, 1/112015; M135JB).

Similar challenges are also experienced at the local government level where the funding for older persons is very limited. The Health Office at the Local Government, for instance, reported that the funding for older persons is very limited; by comparison, the funding is only equivalent to 30 percent of existing programs for expectant mothers. The Health Office illustrates the comparison between the elderly program and expectant-mother programs as one activity for older people and four activities for expectant mothers. Limited funding was also experienced by the Yogyakarta Health Office which noted a total lack of support since 2011 from the central government. All the funding for older-person activities were provided locally. The provincial government allocated 278 million Rupiah distributed to five districts in Yogyakarta (Yogyakarta, 05/10/2015; F90GKD). The funding was very limited compared with the number of older persons in Yogyakarta where, as earlier noted, the proportion of older persons is the highest in Indonesia.

The limited funding for health and social care for the elderly in Indonesia reflects the contemporary global debate on the extent of affordability in terms of the strain on official budgets (Hall & Scragg, 2012). In the UK, for instance, since the 1980s social welfare has been portrayed as something of residual luxury, and oppositional to the national requirements of wealth creation and economic competitiveness (Beresford, 2005). The limited funding and small coverage of social welfare programs for older persons might indicate that they are a neglected segment of society due to lack of attention and were not a high priority of the Indonesian government. A government officer from Ministry of Social Affairs stated: *"The government only focuses on the wellbeing of children without considering the ageing population that will emerge soon"* (Jakarta, 15/10/2015; M133JS).

All this emphasises that developing policies and programs for older persons is not a government priority, and that the government focuses more on children. Policy is often driven by political ideology and economic choices. The political ideology of policy makers in developing policy concentrates on investment, and children are seen as investment for the future. The RPJMN 2020-2024 (Medium-Term National Development Plan) as a road map of policy development also shows that children, expectant mothers and young people are the major concern of the government, whereas the plan contains no specific reference to policy on older people. The government priority in designing programs and budget allocations shows how people are stratified by their age. The stratification often leads to unequal treatment. O'rand (2018) maintained that age is a relatively persistent principle of stratification in high-income countries. Government resources are allocated differently by age to the young and older people.

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Similarly, a Health Office staffer in Yogyakarta who had responsibility for managing programs for older persons maintained that developing programs for the elderly is a choice and not a priority in health service centres as she stated:

In the Health Office, programs for the elderly have existed for a long time. However, such programs have not become a priority yet, and it is a choice or optionalprogram (Program Unggulan) in one of the health centres. So, it has not become a priority (Yogyakarta, 05/10/2015; F90GKD).

According to the Health Office staff, one of the causes of the low level of concern is the content of the MDGs (Millennium Development Goals) of which older persons are not a part.

In the health sector, the MDGs are still employing environmental sustainability, but older persons are not included. Older persons are not included as well in the minimum service standards (Standar Pelayanan Minimal-SPM). Older persons were only included in the life expectancy sector in 2008 (Yogyakarta, 05/10/2015).

The health staffer mentioned during the interview that the MDGs are used as a basis in planning programs in the Ministry of Health. In 2015 when the interview was conducted, the SDGs were not implemented yet. In the MDGs, older persons are not explicitly mentioned, unlike children and expectant mothers. In the MDGs, it is explicitly stated that the goals include achieving universal primary education, reducing child mortality and improving maternal health. In the SDGs, one of the basic principles is "leave no-one behind" and by implication older persons must therefore be involved in the stated SDGs aims of poverty eradication, good health, gender equality, economic growth and decent work, reduced inequalities and sustainable cities. However, in the local context in Indonesia, older persons are still left behind more than any other age group.

Another reason for excluding older persons from government priorities is that older persons are not mentioned in the indicators of achievement of the minimum service standards (*Standar Pelayanan Minimal-SPM*) in the Ministry of Health. In 2004, one of the indicators in the SPM was that 70 percent of older persons should receive services, but in 2008 to 2015, they were not part of the indicators in the SPM. The exclusion of older persons from the quality service indicators might influence the quality of the service they receive. Low quality service is often experienced by older persons who have health insurance. Some of them said that health insurance fails to provide good quality service. Amir, an 81-year-old retired civil servant living in North Sumatra, for instance, stated:

I am self-reliant and healthy, I take my medicine regularly, every week I go to the doctor, every Thursday we check our health, we go using public transport, if we go to Puskesmas we use health insurance...if I go to Puskesmas, I usually will not get

better (ga sembuh-sembuh), so we go to the doctor. If we go to the doctor, I recover quickly, I have health insurance, but it fails (gagal). (Muara, 16/3/2017; M44TD)

Similarly, Udin, a sick and poor man of 85 years stated:

I feel sad when I do not have money, as I cannot pay a doctor (ga ada buat suntik)...I have health insurance (KIS). Using medicine covered by KIS cannot make me feel better (rasane ra ono blas), KIS is nothing (pake kartu ga ada apaapanya), I feel much better if I pay for the medicine, the medicine is different, I feel more confident if I pay for medical treatment" (Bugoharjo, 5/02/2017; M33LS).

The cases above illustrate the low quality of treatment under health insurance. Both Amir and Udin prefer to go to a doctor and pay for their treatment when they can, rather than go to the community health centre using their health insurance due to the low quality of treatment. Amir, a former government official and now a pensioner clearly stated that the National Health Insurance failed him. Even Amir, a poor elderly man prefers not to use the National Health Insurance (KIS) and pay for medical treatment to get better health treatment. Living in poverty does not always stop the elderly from accessing paid quality health care. They force themselves to pay for quality services in order to recover from their illness. The case of a poor woman of 64 years old, Tina, who cares for her two aunts, both aged over 90 years, is relevant. She forced herself to pay for quality health services for her aunts as she did not trust the KIS medical treatment (*Bugoharjo, 5/02/2017;* F34LS).

The World Bank (2004) maintained that social services fail when the services are too often inaccessible or prohibitively expensive, but even when accessible, the services are often dysfunctional, very low in technical quality, and unresponsive to the needs of a diverse clientele. So, many poor people bypass such services as KIS and use more costly medical treatment or seek better quality medical treatment.

7.5 Factors determining access to social welfare programs for older people

Any exclusion of older persons from government services is seen as a potential consequence of a number of risk factors or its potential causes. As outlined in Chapter 2, three groups of factors might influence the access of older persons to services, including socio-demographic exposure, coping capacities and participation in economic activities (Schröder-Butterfill & Marianti, 2006; Van Minh et al., 2012; Cao and Rammohan, 2016; Glass et al., 2006). I also added the disability aspect, measured by difficulties in performing one or more Activities of Daily Living (ADLs). The disability measure is often used to measure the need of care or the need of services. Table 7.2 describes the percentage of factors associated with accessing social welfare programs for elderly.

VARIABLES	Health Insurance (N: 1,793)	Pension (N: 1,547)	Poslansia (N: 1,426)	<i>Raskin</i> (N: 1,793)
SOCIO-DEMOGRAPHIC CHARACTERIS				
Sex				
Female	41.0	4.9	18.4	48.4
Male	44.1	13.2	11	46.1
Age Group				
60-69	43.8	7.7	18.6	46.6
70-79	41.0	10.5	14.1	48.4
80+	42.0	8.6	6.4	48.0
Marital Status				
Married	43.5	9.3	15.4	44.9
Unmarried	40.4	7.5	14.6	52.0
Child Presence				
Both migrant and non-migrant	42.0	8.0	16.6	48.5
Migrant only	43.7	9.1	16.8	46.7
Non-migrant only	43.4	10.2	7.8	44.4
No child	30.3	8.8	5.9	44.1
Region				
Giriasih	23.2	NA	27.6	74.0
Muara	40.0	10.2	9.8	49.8
Cacaban	54.4	12.9	0.0	35.1
Bugoharjo	38.8	0.3	9.8	69.1
Rejoagung	50.0	8.3	26.6	51.0
Gunungsari	40.0	11.1	19.1	15.8
NEED OR ILLNESS LEVEL				
Disability				
No	42.6	8.5	16.6	46.8
Yes	41.3	9.9	7.6	50.2
COPING/ENABLING CHARACTERISTICS	3			
Socio-Economic status (income)				
Poor	42.1	1.1	16.8	61.6
Medium	38.9	4.1	11.9	50.0
Rich	46.2	19.1	16.5	30.4
Education Attainment				
None or less than primary	37.1	2.2	11.9	55.4
Primary	41.7	4.7	16.0	45.8
Secondary +	56.2	35.4	19.7	33.7
Land Ownership				
No	54.7	8.4	16.5	55.0
Yes	35.1	8.9	14.2	42.8
Employment				
No	48.3	11.9	12.6	44.2

Table 7.2: The percentage of beneficiaries of social welfare programs for older peopleby socio-demographic characteristics, health status and enabling capacities

VARIABLES	Health Insurance (N: 1,793)	Pension (N: 1,547)	<i>Poslansia</i> (N: 1,426)	<i>Raskin</i> (N: 1,793)
Yes	38.1	6.2	17.1	49.3
Mean Child Transfer (Log)	8.36	6.74	8.48	8.37

Bold= p value < .05

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

7.5.1 Socio-demographic characteristics

Socio-demographic characteristics include sex, age group, region and the level of social connectedness (the presence of spouse and children). Forty-one percent of older women and 44 percent of men are enrolled in National Health Insurance. The number of older men who have a pension is more than double the figure for older women (13.2 percent versus just below 5 percent). This indicates that the men had a better-paid occupation when they were younger and are more secure in their old age than elderly women. In contrast, women have higher participation in the *Poslansia* program than elderly men. Regarding the receipt of *Raskin*, there is no significant difference between men and women (48.4 percent women versus 46.1 percent men).

There is no significantly different proportion of the elderly who are enrolled in National Health Insurance and have a pension by age group. However, the proportion of those who participate in the *Poslansia* program drops significantly by age group from 18.6 percent at the age 60-69 years to just over 6 percent at ages 80+. The proportion of access to services also varies by villages as a proxy for regions. The proportion of older persons enrolled in health insurance is generally high in relatively rich villages such as Rejoagung and Cacaban. This may reflect a higher capacity to pay the health insurance premiums. The older generation's participation in *Poslansia* is relatively high in villages in Java. Those in the villages in Java (Giriasih, Bugoharjo and Rejoagung) also have a higher proportion of receiving *Raskin* than older persons from other villages.

The percentage of participation in *poslansia* programs also varies according to the presence of children. Those whose adult children had all migrated from the village have a significant proportion of attendance at *poslansia* activities (16.8 percent) compared with those who have no children (5.9 percent) or those whose children are co-residing or living in the same village (7.8 percent). However, these groups show no significantly different proportions of involvement in other social welfare programs.

7.5.2 Needs or illness level

Needs are measured by indicators of health status, particularly disability measures. In levels of access to social services (except in *Poslansia* participation), Table 7.2 shows no significant difference in the proportion of the elderly who have difficulties in performing daily living activity

versus those who are healthy. Disabled older persons have significantly lower participation rates of *Poslansia* activities than those without disability.

7.5.3 Coping capacities

Coping capacity factors take the form of individual or family level characteristics such as income, educational attainment, employment and the amount of child financial support in meeting the social services requirements. Table 7.2 describes the significant difference in the proportions of access to social services by social class. The proportion of pensioners increases significantly by increasing social class, from just over 1 percent for the poor to just over 19 percent for the wealthy. The proportion of older persons who have a pension also increases significantly according to increasing educational attainment. For instance, only 2.2 percent of older people who have none or less than primary education have pensions, compared to 35.5 percent of those who completed secondary or further education. In contrast, the proportion of older persons who receive *Raskin* decreases significantly by educational attainment from 55.4 percent to 33.7 percent. Due to the strong relationship between accessing pensions and educational attainment and socio-economic status, in the multivariate analysis the two variables (education attainment and socio-economic status) will be dropped or not considered.

Table 7.2 also describes that the amounts of financial support from children have a significant association with accessing social welfare programs except in participation in the *Poslansia* program. For instance, those with health insurance have significantly higher mean financial support from children whereas the elderly who have pensions have significantly lower mean financial support from their children. The lower likelihood that children will transfer money to their parents who have pensions is consistent with the findings discussed in Chapter 6 on the role of financial support from children in parents' overall income. Children are more likely to transfer money based on the financial situation of their parents. If their parents receive pensions, the mean transfer from children is lower than in other cases. It is most likely that the children consider their pensioner parents as already having adequate financial support. Table 7.2 also describes the varied proportion of access to services by economic activity. The elderly who still work have a lower proportion of participation in *Poslansia* and in receiving *Raskin*.

7.6 Obstacles and factors determining Inequalities in accessing social welfare programs for elderly

Logistic regression analysis was performed to study risk and protective factors determining the likelihood of social exclusion in accessing social welfare programs for the elderly. Access to social welfare programs is assigned by a binary dependent variable, a value of one if the person is enrolled in the programs and zero if the person is not. The logistic regression method in the analysis assumes that older persons have two conditions: having access to social welfare programs for the elderly or having no access. The probability of accessing the programs depends on the factors described in Table 7.3.

Table 7.3: Logistic regression model: determinants of social exclusion from social
welfare programs for the elderly

Variables	Health Insurance (N: 1,793)	Pension (N: 1,547)	<i>Poslansia</i> (N: 1,426)	<i>Raskin</i> (N: 1,793)
SOCIO-DEMOGRAPHIC CHARACTERISTICS				
Male (VS Female)	1.115	4.878 ***	0.345 ***	1.103
Age group (VS 60-69)				
70-79	0.783 **	1.014	0.874	0.902
80+	0.944	0.654	0.418 ***	0.825
Married VS Unmarried	0.923	1.355	1.060	1.247 *
Child Presence (VS Migrant child only)				
Both migrant and non-migrant child	1.021	0.676 *	0.968	1.034
Non-migrant child only	0.912	0.749	0.563 **	0.855
No children	0.623	0.539	0.317	0.977
Region (Rejoagung-East Java)				
Giriasih (Yogyakarta)	0.450 ***		1.608 *	2.412 ***
Muara (North Sumatra)	0.735	1.827 *	0.214 ***	1.277
Cacaban (West Java)	1.741 ***	1.873 ***	1.000	0.493 ***
Bugoarjo (East Java)	0.844	0.041 ***	0.326 ***	1.948 ***
Gunungsari (Bali)	0.792	1.432	0.782	0.140 ***
NEED OR ILLNESS LEVEL				
ADLs Difficulty (VS None)	0.970	0.797	0.507 ***	1.163
ENABLING/COPING CAPACITIES				
SES (VS Poor)				
Medium	0.770 **		0.763	0.611 ***
Rich	0.938		1.095	0.266 ***
Education Attainment (VS Non or less than primary)				
Primary	1.080		1.601 ***	0.789 *
Secondary +	2.434 ***		2.008 ***	0.473 ***
Land Ownership (VS None)	2.098 ***	0.890	1.436 **	2.154 ***
Child transfer	1.030 ***	0.958 **	1.019	1.016
Working (VS None)	0.672 ***	0.246 ***	1.584 ***	1.311 **

Note: - Significance level *** p<0.01, ** p<0.05, *, p<0.1.

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Table 7.3 describes the odds ratios of the correlates of social exclusion of the elderly from social rights. The model as a whole suggests that the influence of independent variables on access to social services is significant (p<0.05). The result showed significant inequalities in accessing government services depending on sex, region, economic activities, child

transfer and social class. This chapter will focus on the discussion of exclusion from access to social services by gender, social class and region.

7.6.1 Gendered pattern of social welfare programs

Table 7.3 shows the sex of the elderly is definitely a significant predictor of enrolment in the pension system and *Poslansia* participation, but sex seems to have no effect when it comes to reporting enrollment in health insurance and receiving *Raskin*. Men are significantly more likely to be enrolled in the pension system than women, or the access of women to the pension system is lower than men.

The likelihood of men accessing the pension system might be caused partly because culturally men are the expected breadwinner. As the breadwinner, many of them previously retired from the civil service or formal business sectors where pensions are the norm. Men are three times more likely to be enrolled in the pension system. This may indicate that elderly women are more vulnerable to old age poverty as many of them lack any pension or savings to finance their old age. The situation of older women is exacerbated by limited access to resources, inheritance and property. Women in patriarchal communities, for instance, have minimal resources and limited rights to inheritance. This might increase their vulnerabilities in old age. Women also tend to live longer than men and that in turn might increase their vulnerability.

In contrast, women are significantly more likely to participate in *Poslansia* activities than men. Elderly men have significantly lower odds at around 66 percent of participation in *Poslansia*. The field observation strengthens this finding as can be seen in the pictures below.



Picture 7.1: *Poslansia* Activity in Giriasih (photo taken on 29/9/2015)



Picture 7.2: Poslansia Activity in Rejoagung (photo taken on 29/9/2015)

The two pictures describe the gendered pattern of the *Poslansia* program in which elderly women participate more than men. As can be seen in the picture, only a small number of men attend *Poslansia*. Picture 7.1 showed the keenness of the elderly women doing elderly gymnastics through the uniforms they wear and their performance. Most of the women also use casual clothes in contrast to the men who use very formal clothes. The formal clothes worn by the men depict their masculinity and symbolise their public role, and the casual uniform indicates that elderly women have attended the activity regularly. Those who join Poslansia activity usually have a uniform for this activity. *Poslansia* is also used for other social activities, for example in Rejoagung, women often sell foods to other participants. The transactions are made after the exercise finishes.

The health cadres also confirm that *Poslansia* activities are mostly attended by women. For instance, the head of *Poslansia* Krajan (Rejoagung village) stated:

The active membership of Poslansia is 37, there are only five male participants but sometimes they don't attend. There are two or three men who are frequently participating. We encourage men to join, however, they are not motivated to participate (Rejoagung, 02/03/2017; F55JI).

The head of Poslansia maintained that men are reluctant to participate. Therefore only a very small number (two to three older men) out of 37 participants join in. Moreover, the word often used by midwives and health cadres, particularly in Cacaban Village, to describe participants in *Poslansia* is "*Ibu*" (*women*).

The midwife for instance stated:

Here, exercise activity is often conducted in the mosque...it is depend on the "ibu"'s (women) whether to check their blood pressure, gout, or cholesterol. If they only want to check their blood pressure, it is free (Cacaban, 18/02/2017; F20ST).

The word "ibu" is used, thus reflecting the most common participants of *Poslansia*/*Posbindu*. The gendered pattern of *Poslansia* and pensions reflects the influence of state and cultural systems in the community. The first factor is state influence, which works through the way programs are organized and provided. State influence can be seen from the fact that the government staff responsible for elderly health, the midwives and health cadres are all women (Picture 7.3). All *Puskesmas* staff who are responsible for elderly health in the research areas are also women. *Puskesmas* staff are supposed to support and supervise *Poslansia* in their activities. This practice might influence the gendered nature of social welfare programs where female participants dominate the services. This practice might also reflect the assumption that the world of caring is often associated with women. Women are often characterized or even stereotyped as nurturing and caring personalities (Kandal, 1988).



Picture 7.1: Poslansia cadres in Bugoharjo village

Moreover, *Poslansia* is also often attached to PKK (Family Welfare Movement) activities. The PKK is a women-based organization designed in the Suharto era and aimed at improving health and welfare in villages. The PKK is often headed by the wives of village officials. Based on this situation, some elderly men may feel embarrassed to participate in *Poslansia* activities as they regard it as a woman's activity. A man of 86 who lives with his wife of 82 and his daughter describes some of the male attitudes towards *Poslansia* activities. His wife still participates in *Poslansia*, particularly for free medical checkups. She stated that she often goes alone to *Poslansia* as her husband is reluctant to attend. Her husband stated: "I do not want to attend, I feel ashamed (*isin kok*), even though I will be taken by motorcycle, I do not want (*emoh*) to go to *Poslansia*" (Bugoharjo, 6/02/2017; M37LS). Similarly, a young organization leader in Tapanuli Utara insisted that the men in his community were ashamed to attend *Poslansia* as they thought it was women's business (Muara, 16/03/2017; M135TT).

The state influence can also be seen in the requirements to access social assistance such as *home care, Aslut*, BKL and *PKH Lansia*. Those programs require the availability of a care provider from the family. The carer of the elderly is often a female family member such as a wife, daughter or daughter in law as discussed in Chapter 5. Chapter 5 also elaborates on the influence of the cultural system whereby support is almost invariably provided by female family members.

The influence of culture on the gendered pattern of social welfare programs can be seen in the higher participation of women. The higher participation of elderly women can reflect gender inequality in the division of labour in the household. In general, men are breadwinners, as such, they are responsible for earning money. Therefore, they prefer to earn money than participate in *Poslansia*. Joko, an elderly man who is still working, maintains that the older men in Giriasih have a more intense passion to earn money (*"makin getol kerjo"*) than young people. Therefore they prefer to engage in money-generating activities than attending *Poslansia* (Giriasih, 5/01/2017; M5GKT). In contrast, women are responsible for domestic tasks and have more time than the men to attend *Poslansia* (Rejoagung, 3/3/2017; *F55JI*).

In addition to the division of work, certain public activities in Muslim communities – especially religious ones – often involve physical separation between women and men. In Islamic recitation (*pengajian/tahlilan/istighosah/mujahadah*) for instance, elderly men or women collect in different groups and conduct activities at different times. Women's groups tend to conduct group activities more often than male groups. Based on this, local leaders maintain that elderly women are more active than the men in public activities (Bugoharjo, 4/02/2017; M28LT).

The gendered pattern of social welfare programs can be seen also in *Halun* (*hari lanjut usia* – days of the older people) and *Aslut* where the majority of the participants are elderly women. Pictures 7.4 and 7.5 describe how *halun* is dominated by elderly women.



Picture 7.4: *Halun* in 2017 (taken from https://majalahkartini.co.id/berita/ratusanlansia-peringatan-hari-lanjut-usia-nasional-2017/)



Picture 7.2: *Halun* in 2018 (taken from https://kebudayaan.kemdikbud.go.id/mkn/har i-lanjut-usia-nasional/)

The beneficiaries of *Aslut* are also mostly elderly women as stated by the Gunung Kidul Social Office staff:

The number of Aslut beneficiaries was 240 people in 2016. However, I do not have data on the detailed numbers of each sex. From my observation, the majority of beneficiaries are the women as they are more vulnerable than the men. Elderly men often die earlier, and female elderly can take care of themselves (Yogyakarta, 15/02/2017; M9GKP)

A social worker who works with elderly people in Giriasih noted the predominance of women as *Aslut* beneficiaries: There are 10 beneficiaries of the Aslut program in Giriasih. Eight of them are elderly women. Most of them experience a very difficult situation. Many of them are very old, very poor and very sick. One of them has a mental problem (Yogyakarta, 12/01/2017; M2GKS)

The percentage of *Aslut* beneficiaries in Giriasih stated above reflected the composition of the *Aslut* program at the national level in which female beneficiaries outnumber the men (Adioetomo et al., 2013). The likelihood of women to receive social assistance is partly caused by their higher life expectancy and their health status is lower than their male counterparts. Eligibility for cash transfers from the Family Hope Program is limited to recipients over 70 years old, and this age group is mostly dominated by women. ARIS data shows that 55.1 percent of the elderly in the research area are women, much higher than men at 44.9 percent.

7.6.2 Unequal access to elderly services by social class: participation and targeting problem?

In general, social protection programs are designed to help poor families. Therefore, the eligibility of recipients is based on the poverty level. Poverty is usually measured by income levels. This chapter employs household income to measure the level of socio economic status (SES). This chapter also uses educational attainment and land possesion to measure social class. The education of older persons is also used as a proxy of human capital which is often treated as a proxy for SES overall.

Table 7.3 (p. 208) describes that socio-economic status has a significant association with access to social services. The higher the social class of the elderly – notably higher educational attainment – the higher their likelihood of accessing social services including pensions, health insurance and *Poslansia*. This model assumes that belonging to a lower social class has a negative influence on the prospect of accessing major social welfare programs for the elderly and may lead to exclusion from available social services. In contrast, under the social assistance approach, if elderly people are more educated or have a higher SES, the lower their likelihood to receive *Raskin*.

Although the wealthier social classes are less likely to receive *Raskin*, the percentage of higher class (non-poor) receiving *Raskin* is nevertheless relatively high. Table 7.2 shows that 30 percent of wealthy older persons and 33.7 percent of those who have completed secondary and higher education are receiving *Raskin*. This result can indicate poor targeting, as *Raskin* is designed to benefit low-income families. This arises because the distribution of *Raskin* in some regions is not only restricted to poor households. This fact strengthens the finding of the OECD (2019) that the rice subsidy for the poor program as the largest social protection program has historically been the least well-targeted.

The poor targeting issue is also encountered in the Family Hope Program for the Elderly (PKH Lansia). This program uses BPS data or the Unified Database (UDB) as a basis for determining beneficiaries. The verification conducted by social workers found that the data from the central government are inadequate as many beneficiaries are in fact not poor. Protests are sometimes heard from members of low-income families who are not included. In one case, some of the elderly were crying to the head of the village asking to be included in the PKH Lansia program. The village head then passed the issue to the social worker. As a result, the house of the social worker was besieged by many older persons asking to be included in the program. The problem was that the beneficiaries were determined by the central government and adding the new beneficiaries needed time before approval was granted by Jakarta (Yogyakarta, 16/03/2018; F136YD). This finding confirms previous research on the targeting of various programs, which concluded that the targeting performance of various safety net and poverty programs was low, meaning that these programs are only slightly pro-poor (Sumarto & Suryahadi, 2001; Suryahadi, Yumna, Raya, & Marbun, 2010). McCarthy and Sumarto (2018) expressed scepticism at the top-down approaches used in the targeting of social assistance programmes. They suggested that community-based targeting, developed using existing community practices, would produce better and more acceptable results.

The top-down identification of social assistance beneficiaries by the central government is criticized by the village leaders as it does not involve consultation with them. The local leaders based on local knowledge and community meetings have their own data on poverty and the potential beneficiaries of social assistance. They propose those potential beneficiaries to the government, but the central government uses its top-down approach resulting in different and even inappropriate beneficiaries (Bugoharjo, 6/02/2017; M28LT).

Another crucial issue related to the top-down approach is the lack of community or elderly participation in designing appropriate social services based on the local context and needs. In most social welfare programs for the elderly, prospective beneficiaries have little or no involvement in the design, implementation, and monitoring of the programs, and were treated just as merely passive objects. Lack of participation from older persons influences the mainstream approach to service delivery which is mostly focused on charity, as stated by a former staffer of the older people's commission in Jakarta.

So, the approach of services for older people is charity. They are considered as the program objects or program beneficiaries (program receivers), older persons' roles are not as subjects or actors who are implementing the programs. The charity approach regards older people as objects. If the older people's position is as a subject, they can participate actively, however, their participation is very limited (Jakarta, 18/10/2015; M136JK).

Lack of participation from older people influences the implementation of various social protection programs which are highly dependent on the role of local activists or cadres (*kaders*). The cadres are usually young women as shown in picture 7.3. Some older persons are however actively becoming cadres of the *Poslansia* program such as in Gunung Sari and Rejoagung villages in which older people lead the cadres of the program. Lack of participation by older people in planning and designing the program might contradict local values. In Bugoharjo for instance, the exercises for the elderly through the *Poslansia* program have attracted little participation as the exercise is held out in public which is not appropriate for the elderly. Physical exercise is seen as socially inappropriate for the elderly as it is considered as an activity for the young, and older persons are seen as more appropriately involved in religious activities (Bugoharjo, 5/02/2017; M28LT).

In addition to lack of participation, the logistic regression also highlights the targeting problem particularly on the "missing middle" problem in the implementation of Indonesia's National Health Insurance program, where the older persons from middle-income groups are still not covered by health insurance. Table 7.3 (p. 208) describes that older persons from middle-income families are significantly less likely to be enrolled in health insurance than lower income and higher income families. There is no significant difference between older persons from low-income families or from wealthy families in terms of enrolment in the National Health Insurance scheme, as the government pays the insurance for poor families while wealthy families can pay for themselves, or their institutions will cover the cost. In cases where they are retired from the civil service or from working in the formal business sector, they are also covered. Informal workers however often find themselves in the "missing middle" of social protection coverage because they are ineligible for social assistance programs but at the same time excluded from employment-based contributory schemes (OECD, 2019).

7.6.3 Unequal access of elderly services by region: decentralization problem?

The village is used as a proxy of the region. Services which provide basic access to food, medication and living costs are central for the survival stategy of many older people. However, the gaps in these services are wider in some regions than others. Table 7.3 (p. 208) shows that the village has a significant association with access to social services. The access of older persons to the social services varies markedly across villages. Figure 7.3 describes the predicted probabilities of accessing social services for the elderly.

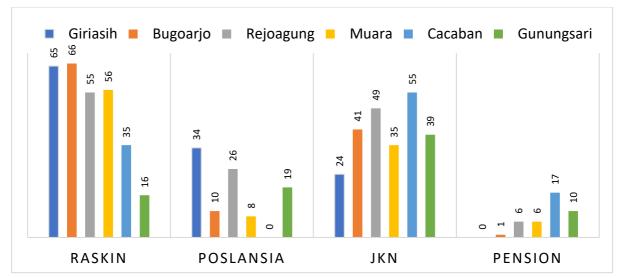


Figure 7.3: Predicted probabilities of accessing social services for the elderly by village

Source: Calculated from 2016 Ageing in Rural Indonesia Survey

Figure 7.3 estimates that the probability that villages in Java (Giriasih, Bugoharjo and Rejoagung) can access social assistance (*Raskin*) are relatively higher than villages outside Java. The qualitative data also shows that villages in Java have a higher access to direct social services to older persons such as *PKH Lansia* and *Aslut*. Table 7.4 describes the accessibility of social assistance across villages.

Villages	Direct services to older persons
Giriasih	PKH Lansia
	Aslut
Bugoharjo	PKH Lansia
	Aslut (existed in district level but not covering Bugoharjo)
Rejoagung	Aslut (existed in district level but not covering Rejoagung)
Muara	None
Cacaban	Aslut (existed in district level but not covering Cacaban)
Gunungsari	Aslut

Table 7.4: The available social assistance programs by village

Source: Interviews with village officials and local government staff 2016-2017

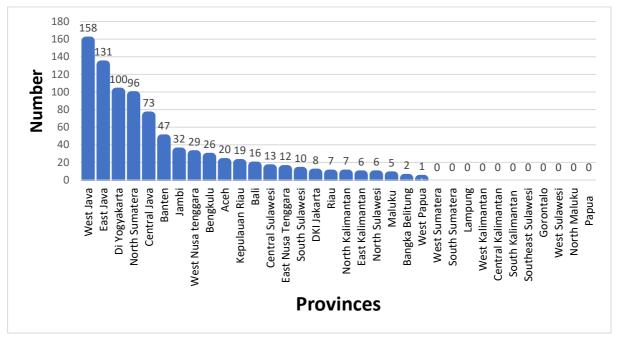
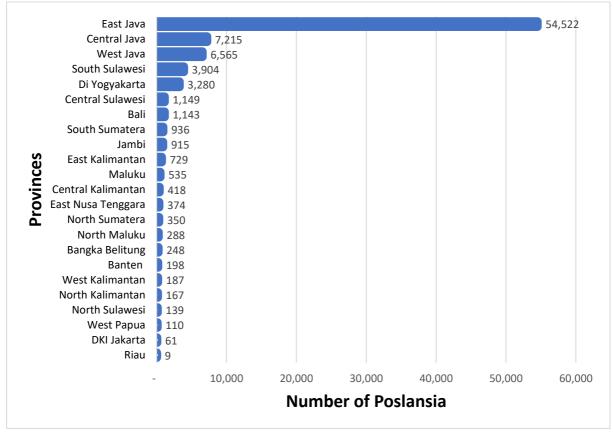


Figure 7.4: The distribution of Puskesmas Santun Lansia by province in 2015

Source: Ministry of Health, 2015





Source: Ministry of Health, 2015

Table 7.4 describes that direct social services for older persons were available in only some of the Javanese villages. It might illustrate the distribution of other programs such as the Elderly Friendly Community Health Centre (*Puskesmas Santun Lansia*) and *Poslansia*. Figure 7.4 and Figure 7.5 describe the unequal distribution of *Puskesmas Santun Lansia* and *Poslansia* by province in 2015.

Figure 7.4 describes the concentration of the *Puskesmas Santun Lansia* program in Java. For instance, the highest program coverage is located in West Java, followed by East Java and Yogyakarta, while the eastern Indonesian provinces such as Papua, North Maluku and Gorontalo register among the lowest number of *Puskesmas Santun Lansia* services. Similarly, Figure 7.5 also describes the concentration of *Poslansia* activity in Java. Poslansia activity in East Java is significantly much higher than other provinces, followed by Central and West Java.

The concentration of social services for older people in Java is likely caused by the fact that the overall Indonesian population is heavily concentrated there. A staffer of the Ministry of Social Affairs stated:

It is a problem in our ministry where the coverage of social services is everywhere, but the largest portion is in Java because the population in Java is the largest compared to other provinces outside Java (Jakarta, 30/10/2015; M133JS).

Similarly, a staffer of BKKBN said:

The programs are focused in Java and Bali, while other regions such as the east Indonesian regions gets less attention. The funding to those regions is also very limited (Jakarta, 30/10/2015).

The statement from the Ministry of Social Affairs and BKKBN might reflect the orientation of the central government's development program, which is concentrated on Java. The other reason for unequal coverage is the requirement, when implementing social assistance from the central government, that recipient districts should be fully prepared. Part of necessary preparedness for the *Aslut* program at the district level, for instance, is the recruiting and training of social workers. If the district is not ready, the district is excluded from the service. Moreover, local governments have different resources in implementing the central government programs. One of the concerns of the provincial and central governments is that they do not have the authority to deliver direct services as, after decentralization, the district government gained the authority to provide direct services to the people. The provinces are representatives of the central government in providing administrative support, direction and monitoring the operations of the districts and municipalities. However, provincial offices have limited autonomy in delivering direct services (Kadar, 2013).

Therefore, all the programs should be coordinated and implemented by the local government. Part of the primary role of the provincial and central governments is to increase

the capacity of human resources at the district level through training the trainers. After that, it is the responsibility of local governments to fund and implement direct services, including services for older persons. The problem is that not all district governments prioritise older persons. This depends on the political will of the individual regent (Yogyakarta, 8/10/2015; F90GKD). A good example of a local government instrumentality which gave priority to older persons is Jember District in which the regent (*Bupati*) instructed all village heads to allocate six million Rupiah (around \$600) each village from their village fund every year to run direct services to older persons based on local needs (Jember, 24/09/2016; M101JD).

The central government started to disburse the village funds at an average amount of Rp 280 million for each village in 2015. The amount was continuously increased in subsequent years, reaching Rp 800 million per village in 2018. Most villages allocated the largest portion, more than 70 percent, of the fund to infrastructure development, particularly roads. Only a small share was allocated for community empowerment (Suryahadi & Al Izzati, 2018; Syukri et al., 2018).

The breakthrough in Jember district might be replicated in other districts as the main concern from local government is lack of funding. Village heads in the research sites are concerned about how to use village funds for services for the elderly as the government limits the use of the fund to infrastructure and community empowerment (only) (Giriasih, 3/01/2017; M1GKT). The lesson learnt in Jember district can be replicated to use the village fund for direct services for the elderly, as part of the "community empowerment" category. The lack of understanding of the empowerment concept might contribute to a lack of funding for the elderly at the village level. The different understanding of the empowerment concept also happens in the central government. According to staff of the Ministry of Social Affairs, the challenge in implementing social services for the elderly is the assumption that social services are not beneficial as they only involve spending the government's money and are not generating income. Therefore, the focus is on economic development. This different understanding influences the amount of funding allocated by the central government for older people.

The Ministry of Social Affairs also insisted that the central government is focusing on developing a model for older-person services. It is the role of local government to replicate the model developed by the Ministry of Social Affairs funded from the local government budget. However, up to now it seems the idea of replicating the central government's plan at the district level is not implemented yet. The key is political will.

A recent so-called 'big-bang' decentralization of 1999 put a strong relevance on the institutional capacity issue in social services for the elderly. Greater responsibilities, as well as authority particularly on budget and expenditure management, were acquired by regional governments, both at provincial and district levels. Patunru, McCulloch, and Von Luebke (2009) and Milne (2006) reported that districts now have more responsibility for most service

delivery, providing public facilities and infrastructure, and issuing local regulations on social, political, and economic matters. Decentralized government and the resulting new aspects of the political system posed new issues for the older generation, and to some extent created inequalities and challenges for the fulfilment of older people's rights, especially if the necessary political will is lacking to back up support services for older persons. One example of the drawbacks in the implementation of decentralization is the fragmented and unequal distribution of health care resources, particularly to rural areas (Kadar et al., 2013).

7.6.4 Multi-Stakeholder as an issue: lack of program integration and coordination

The previous section describes the comprehensive programs implemented by multistakeholders from government institutions. The comprehensive programs are the strength and represent to some extent good practice in social welfare programs for the elderly in Indonesia. However, the implementation of the programs lacks integration as programs are mostly run separately by different institutions. The coordination is conducted among the government agencies, but effectiveness is less than it should be due to absenteeism and changes in personnel responsible for coordination. Moreover, coordination meetings are also often attended by lower-level staff who lack authority for decision making (Yogyakarta, 8/10/2015; F90GKD). This finding strengthens the finding of the OECD (2019), which reported a lack of co-ordination in social protection provisions across different levels of government. As a result, national programmes might not receive the buy-in they need from provincial and local governments, and the implementation of centrally-led reforms can differ from what was intended.

Lack of integration and coordination also occurs within a ministry. For instance, the Ministry of Health runs the *Posbindu* and *Poslansia* programs, both of which have similar designs and beneficiaries. Both programs conduct health checks and exercise programs for the elderly but these are implemented by different staff at *Puskesmas* and cadres at the village level. The lack of suitable human resources at *Puskesmas* and communities hampers the program implementation. It is relatively difficult to find different *Puskesmas* staff and cadres to run the two programs in communities (Buleleng, 28/09/2016; F137BD). Another example is the complaint by the head of Pucuk *Puskesmas* about coordination problems at the sub-district level. The coordination is conducted with the unit office of BKKBN at the sub-district level once each month, but it seems the only working institution is only *Puskesmas* as family planning which is the responsibility of BKKBN is also handled by *Puskesmas* (Lamongan, 16/09/2016; M78LT). Lack of coordination of inter-governmental ministries and between central government, provincial and district government becomes a serious challenge in implementing social protection programs.

7.6.5 Poorly prepared health care workers

Chapter 4 elaborates that the most common health services accessed by older people are health services provided by the midwife and paramedic (*Mantri*). The midwife usually manages *Polindes* (health services at village level) and *Poslansia* activity. Midwives are often unprepared to effectively manage the health care needs of older adults as their educational background is usually directed at helping children and expectant mothers. They are rarely trained to work with older people and how to deal with old-age health issues such as dementia, depression and frailty. Midwives and other health-care professionals need the right competencies and skills to care for older persons. Kadar et al. (2013) also found that the majority of health care staff, especially the nurses in community health centres, have limited or no specialist skills in caring for the aged in community settings. Kadar et al. (2013) also found that health care professionals responsible for implementation of government funded programs for older people have limited understanding of the programs.

7.7 How to improve

Population ageing requires urgent action. How and how much can government help? The answer is that government can and should help, and it has been noted that social policy is one of the strategic alternatives in fulfilling the needs and rights of disadvantaged groups. Some potential strategies to improve the service delivery for older people can be found. The first is increasing public spending and coverage for social welfare programs to accommodate the aging demographic transition and provide the health care and retirement income and security needs of older people.

Why should public spending for older persons be increased?. It is the role of government to ensure that no one, including older persons, is left behind, if Sustainable Development Goals (SDGs) are to be achieved. Leaving no-one behind is the basic principle in the SDGs agenda. However, older persons are a neglected segment of society and they do not receive sufficient priority, as discussed in the previous section. Social protection may be relatively expensive and indeed needs adequate policy design and sufficient funds, and this presents a challenge for low-income countries in terms of implementation. The mean cost of a basic package of social protection including a universal pension covering old age, disability and a child benefit, would amount to around two to three percent of GDP (Barrientos & Hulme 2008). Providing social protection programs, particularly a caregiving program, is nevertheless vital to the achievement of the 2030 SDGs Agenda and to guarantee healthy and productive lives of older persons. Ageing is relevant to many goals in the SDGs agenda, including poverty eradication, health, gender equality, economic growth and decent work, reduced inequality and

sustainable cities. Based on this, mainstreaming appropriate social welfare programs for the elderly is vital to achieve the SDGs agenda at the national and local level.

The second approach is to develop and mobilize networks of the United Nations, the corporate social responsibilities of companies, and other non-government organizations, so that both local and international institutions take part in promoting social welfare for the elderly. The collaboration between government and non-government institutions is tremendously important in helping solve limited budget issues in the effort to achieve the welfare of elderly people in Indonesia. Corporate social responsibilities (CSR) of companies, for instance, has a large amount of funding to run development programs for communities. Rosser and Edwin (2010) cited Fox (2004, p. 30) in defining CSR as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interactions with their stakeholders on a voluntary basis". Indonesia is the first country to introduce mandatory legal requirements for CSR through the law 40/2007 on Limited Liability Companies (LLCs) (Rosser & Edwin, 2010). The government can facilitate and give technical assistance to focus CSR programs on providing social welfare programs for the elderly. The government also could provide tax incentives or reductions for the companies that offer services for older persons.

The third approach is encouraging local government to replicate the model of social services developed by the central government. The replication should use local government budgets. The fourth is combining top-down and bottom-up approaches in selecting beneficiaries particularly for the *PKH Lansia* program, so that the data from BPS is not the only data source used in choosing program beneficiaries. The fifth is to broaden the usage of village budgets (*Dana Desa*) to run social welfare services for the elderly in each village. The interviews with village heads concluded that they could not make allocations for elderly activities from the village budget as the government restricted the budget targeting to infrastructure and community empowerment. Allowing the use of the budget to benefit the health of the elderly and for their other activities is a significant breakthrough and is indeed a form of community empowerment. A good example of village fund usage for older people's wellbeing has been implemented in Jember District.

The sixth approach is integrating social services for older people based on the strength of each government institution. For instance, Bina keluarga lansia-BKL (Empowerment program for families with elderly) program conducted by the BKKBN can be integrated into *Poslansia*, *PKH Lansia* and *Karang Werdha*. One of the strengths of the BKKBN is awareness raising about the care of older persons. The tool kit developed by BKKBN can be used in *Poslansia* and *Karang Werdha* activities. Another example is the Social Office's *Permakanan* program which could be used to collaborate with the healthy food programs in *Poslansia* as lack of funding is often one of the obstacles in providing healthy food. The *Permakanan* program can support the healthy food programs in *Poslansia* and simultaneously

attract older people to attend *Poslansia*. Distributing noodles as part of the package in the *Permakanan* program might however not be beneficial for the elderly as noodles are not healthy food. Handled properly, program integration can provide a strategic breakthrough which could reduce the distribution of unhealthy food for older persons. Improving coordination among key stakeholder organizations is essential for program integration and program effectiveness.

The seventh approach is improving the participation of older persons in planning, designing and implementing social services for them. Older people have a right to be involved and consulted. They have a right to be heard and their participation is valuable. The final consideration is improving the competencies and skills of health professionals including midwives and health cadres at the village level on such disciplines as gerontology, geriatrics and management of health conditions faced by the older population such as frailty, osteoporosis, arthritis, depression and dementia. It is important to include those competencies and skills in the schools or higher education curricula for health professionals. Geriatric specialists with expertise to treat complex cases should also be placed in hospitals in the regions where the percentage of older persons is high, though this is no doubt a longer-term aspiration.

7.12 Conclusion

The main aim of this chapter is to analyse how and in what way government has supported elderly persons; the extent of access of older people to the components of the main government programs and how existing programs can be improved. The Indonesian government has made efforts to fulfil the social rights of the elderly through social welfare programs that can be clustered into five groups, including social assistance, social insurance, health provisions, empowerment, and awareness raising. Most programmes are initiated by the central government and only a small number of programs initiated by local governments. Most programs initiated by local governments embody a charity-based approach. Those programs are very small in scope and underfunded. The small coverage and lack of funding indicate that older persons are still a neglected segment of society.

In addition to the low coverage, there are some inequalities in accessing the programs. The first is the gendered pattern in their implementation, which is influenced by the state's approach and certain cultural assumptions in the local communities themselves. The state influence works through the way programs are organized and provided. Almost all government staff responsible for the health of the elderly, i.e., midwives and health cadres, are women. The state influence can also be seen in the eligibility rules of access to social assistance such as *home care, Aslut*, BKL and *PKH Lansia*. Those programs require the availability of a care

provider from the family and that is commonly a female family member such as a wife, a daughter or a daughter in law. The influence of the cultural system on the gendered pattern of social welfare programs can be seen in the higher participation of older women. The higher participation of elderly women might reflect the gender inequality of the standard "division of labour" in the household. In general, men are family breadwinners, and thus responsible for earning money. Therefore, they prefer to earn money rather than participate in *Poslansia*. In addition to the division of work, Muslim communities often separate public activities between women and men.

The second factor is unequal access to services because of social class. The higher the social class of the elderly (notably higher educational attainment), the higher their likelihood to access social services including pensions, health insurance and *Poslansia*. Although the higher social class are less likely to receive the *Raskin* program, the percentage of the higher classes (non-poor) receiving *Raskin* is still relatively high. This may indicate poor targeting as *Raskin* is supposedly designed for low-income families. The poor targeting issue is also encountered in the Family Hope Program/Conditional Cash Transfer for the elderly (*PKH Lansia*). The Family Hope Program uses BPS data as a basis for determining beneficiaries, but the verification conducted by social workers found the data inadequate as many beneficiaries are not poor. The "missing middle" problem also arises in the implementation of Indonesia's National Health Insurance program where the older persons coming from middle-income groups remain uncovered by health insurance.

The third problem is the unequal access to elderly services by region. Services for older people are more easily accessible in Java than elsewhere. This no doubt reflects the orientation of the development programs, which focus on western Indonesia, and another obvious factor is the heavy concentration of population in Java. Decentralization also might contribute to the unequal access of service delivery for older people. Another challenge is the lack of involvement and participation from older persons and the lack of program integration among ministries.

Potential strategies aimed at improving service delivery for older people can be identified, including increasing public spending and coverage of social welfare programs; developing and mobilizing networks from the United Nations, corporate social responsibilities of companies, and other non-government organizations; encouraging local governments to replicate the social service models developed by the central government; broadening the usage of village budget (*Dana Desa*) to run social welfare services to the elderly; combining top down and bottom up approaches in selecting beneficiaries; integrating social services to older people based on the strength of each government institution, and improving the participation of older persons in planning, designing and implementing social services for them.

Ignoring these recommendations might lead to program ineffectiveness and the elderly in Indonesia – specifically those in rural areas – being left behind and not being prioritized.

Chapter 8 – Conclusion

8.1 Introduction

The demographic transition characterized by decreasing fertility rates and increasing life expectancy, the migration of young people and labour force participation contribute to a decline in the availability of family-based care in "the pockets of ageing" in rural Indonesia. Up to now, little research attention has been devoted to investigating the unequal situation of the older generation in rural Indonesia, their needs and the underlying causes of inequality. My research looks at the current situation of older people in rural areas and its intersection with their environment across socio-demographic groups, how inequality is produced in old age, what are the underlying causes of inequality and how to improve the existing system. This study is very important in anticipating the future needs of elderly people and in formulating appropriate policies. The 2016 Ageing in Rural Indonesian Survey (ARIS) was used as the primary data. This survey was initiated by Professor Peter McDonald, Dr. Iwu Dwisetyani Utomo, Dr. Arianne Utomo and Dr Robert Sparrow. Among ten villages in the survey, I selected six villages to compare the nature and situation of older people. The 2016 Ageing in Rural Indonesian Survey is one of the first pieces of ageing research in Indonesia employing a mixed method approach by collecting data at village, district, provincial and national level. The study is also the first research in Indonesia that collected data from various respondents including older persons, co-resident children, adult children who had migrated, household heads, midwives, health cadres, religious leaders, village leaders and government officers from various institutions.

Guided by old age vulnerability theories introduced by Schröder-Butterfill and Marianti (2006), the research identified first the older people's perceptions of the outcomes that they seek to pursue and avoid during their old age. These outcomes are defined as dependent variables. Three groups of factors might influence the situation of older people, including sociodemographic exposure, social engagement and coping capacities. Socio-demographic exposure includes being spouseless, being childless, being female, being among the "oldestold", living outside Java, and ethnicity. Coping capacities are measured by human capital, social class, financial support from children, possession of productive assets and access to government programs. Participation or social engagement refers to religious activity attendance, economic activity and caring roles in a family.

8.2 Summary of findings and contribution to knowledge

The main argument in this research is that there is an inequality in the life situation of older people across regions, ethnicity, social class and gender. This thesis has contributed to knowledge and for the development of science particularly on social gerontology by showing that family support systems as well as the community and welfare systems govern the experience of inequality in later life. The family system through the division of labour in the household, the community system, as in the work environment and opportunities in accessing resources and the organisation of the welfare system, contribute to produce the inequalities. This main argument contributes to enriching theories on the quality of life and welfare, vulnerability, how people are socially stratified, social protection for the elderly and how support systems for the elderly are working (or not) in the rural Indonesian context as discussed below.

8.2.1 Quality of life and well-being theories

Most ageing studies in Asia (for example Andrews 1992; Hermalin 1997; Martin and Kinsella 1994; Andrews and Hermalin 2000), tended to concentrate on measuring one dimension of the elders' well-being, such as health and economic wellbeing. Most of those studies determined the definitions and dimensions of wellbeing referring to the existing literature. The experience of aging is not universal. It is a social reality constructed by meanings of everyday life (Samanta, 2017). As the experience of being older is not universal, it is important to identify first the perceptions of older people themselves of what constitutes their wellbeing. Identifying the target group's perceptions is powerful because identifying how people think is a key to developing more effective and strategic policy (Lindand, Fond, Haydon, & Kendall-Taylor, 2015).

This study is one of the first researches in Indonesia identifying the older people's perceptions of what constitutes their own wellbeing and vulnerability. Older persons were asked about the outcomes they seek to avoid and pursue in old age. Two methods were employed in identifying outcomes that older people seek to avoid and pursue. The first is asking them directly about their most important needs and what they regarded as the most important things in their lives. When these needs are fulfilled, this is considered as a good outcome for their old age. They were also asked about the things or events that made them happy. The things or events that make older persons happy might be considered as fulfilling their needs and as a good outcome. If these needs are not fulfilled, serious harm might eventuate. These unfulfilled needs can be categorized as bad outcomes. Based on this approach, a hierarchy of needs was identified, starting from the need for good health, the need for care, for access to services, income and functional capacities. These five needs are then can be categorized as the dimension of wellness according to older people. These five dimensions are elaborated in detail in four main chapters of this thesis including the dimension of health and functional capacities was investigated in chapter four, the dimension of need of

care was described in chapter five, the dimension of income was examined in chapter six and the dimension of access to services was elaborated in chapter seven.

The second approach is to ask older people directly about the outcomes that they try to avoid or make them sad. It was found that the states that older people try to avoid, or the things that make them sad are untimely death; poor health; poverty; disability; impairment, loneliness and worry about the condition of their children and grandchildren. These findings are the opposite of the first approach. When the older persons are asked about their main need, for instance, they answer "health", while when asked about their problems, they answer "poor health". It indicates that the need is a manifestation or an outcome of a problem.

These findings strengthen the existing literature on theories about the welfare or wellbeing of older people. Welfare is often defined as a condition of wellbeing, the ability to meet needs and manage problems (Midgley, 1995). As a condition where needs are being fulfilled, a body of literature demonstrates the principal needs of older persons are health, care and income. I argue that in addition to those needs, my findings highlight another main need of older people, viz the importance of functioning, which in this context means being able to conduct daily activities. In the literature, functioning is often measured by Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). Activities of Daily Living (ADLs) refer to a set of common everyday activities, which are required for personal self-care and independent living including bathing, dressing, transferring, using the toilet, continence and eating (Katz et al., 1963; Katz, 1983). Instrumental Activity Daily Livings are often measured by the ability to do domestic work, travelling and financial activities. The ability to perform those activities is among the vital elements of older people's quality of life.

This research found functioning is broader than the concept of ADLs and IADLs. According to the older people themselves, functional capacity includes broader roles and activities such as the ability to worship God, being able to do daily activities, being able to work and capacity to give financial assistance to grandchildren. Functional capacities in the rural ageing context can reflect the expected roles and appropriate activities that might be conducted by older persons. Increasing the intensity of worshipping God, for instance, is often considered as an appropriate activity for older persons. These expected roles or appropriate activities are often socially constructed or required by religious norms. Worshipping God in general or, for Muslims, performing the pilgrimage to Mecca in particular are required by religious rules. Therefore, it is socially expected that when people are reaching old age, they will increase the intensity of religious activity. These religious norms influence the felt needs of older people. Religious norms and local values in the community produce the expected roles and activities of the elderly. The ability to perform expected roles by worshipping God constructed from religious and local values constitute the quality of older people's life. Another expected role is contributing to the family, particularly in taking care of grandchildren. Taking

care of grandchildren is part of collective behaviour practised in rural Indonesia to ease the burdens of children and to contribute to family. As collective behaviour, it is socially constructed and has become a custom. These expected roles and activities for older persons might also influence their wellbeing. If older people cannot perform those expected roles or activities, their perceived quality of life may be adversely affected. This research found that parents often worried about the future of their children and grandchildren if they were unable to contribute significantly to their support. These local values on the expected roles to make a contribution for their children and grandchildren might affect their quality of life.

Conversely, it is also expected that children should provide long term care for the elderly. Caregiving to parents is required inter alia by religious rules. I argue that the expected roles of children towards their parents' influences what constitutes successful ageing. This research found that the availability of care providers, particularly children, is one of the indicators of successful ageing. This research found that successful ageing is not only the freedom from disease and disability, high cognitive and physical functioning, as well as active engagement with life (as described Moody, 2005; Achenbaum, 2001; Butler & Gleason, 1985; Rowe & Kahn, 1997), but it is also determined by the availability of children as carers in their old age. It is influenced by the social and religious norms determining the expected roles of both older persons and children. The social and religious norms coordinate older people's expectations, roles and needs that in turn influence their overall wellbeing.

Social and religious norms also play significant roles in adaptive strategies to cope with risks and daily hardships. Attending religious activities and reciting from holy books are part of strategic coping skills for loneliness and anxiety. The elderly who often attend religious activities are less likely to suffer from anxiety, and attendance at religious activities is also often used by elderly women to find work. Attending religious activities is also often used to share job opportunities in agricultural sectors. At harvest time, employers can often find workers during religious gatherings. Social and religious norms also play a significant role as traditional social protection in the absence of formal support in rural areas (This will be discussed in the section on long term care below).

These findings are similar to the Seven Dimension of Wellness concept issued by the International Council on Active Aging (ICAA) particularly on the dimension of physical, emotional, spiritual, social, and vocational. The International Council on Active Aging pointed out that wellness is an outcome of people's ability to understand, admit and take action based people's capacity to lead a purpose-filled and engaged life (The ICAA, 2020). There are seven dimensions of wellness becoming a framework that is valuable for serving the wants and needs of a person engaged in life including emotional, intellectual/cognitive, physical, professional/vocational, social, spiritual and environmental dimensions. However, my finding emphasising the importance of access to services and the ability to performing the expected

roles which are not mentioned by the ICAA framework. Part of the ability to perform expected roles found in my study is the ability to worshipping God, which is very similar to the spiritual dimension in the ICAA. However, my study found broader concept of ability in performing expected roles as older persons such as providing care (physical, emotional and financial supports) for grandchildren. These expected roles might differ across cultures. Future work on these expected roles across different cultural settings puts these focuses into sharper relief.

Moreover, access to government services is also a significant aspect of older people's wellbeing as they are likely to feel insecure with inadequate roles of traditional social protection and informal support. Feeling secure by accessing government services is then become part of the dimension of wellness according to older people. In addition to this, my study did not find explicitly that environment dimension is part of older persons' crucial needs, as stated in the ICAA. The International Council on Active Aging stated that respecting resources by choosing "green" processes that re-use and recycle goods are part of the environment dimension (The ICAA, 2020).

8.2.2 Gender inequality in later life as an outcome of unequal systems

Up to now, little attention has been devoted to investigating how inequality is produced, and its intersection with gender in old age in rural Indonesia. Understanding gender inequality in old age is essential in understanding society and the mechanisms of how inequality works. This study found that gender inequality still persists until old age. Elderly men are significantly less likely than elderly women to have lower levels of health status in the three dimensions of health, namely physical health, disability and mental health. Elderly women are more likely than men to live alone, and older men are more likely than older women to live with a spouse. Older women are also both care recipients and care providers. Elderly men are significantly more likely to have higher educational attainment than women.

This study also found that women provide a disproportionate amount of unpaid care and domestic work for their husbands, families and communities. Among family members, women, particularly elderly women and their daughters are located centrally as the care providers for older persons. In addition to providing unpaid care to husband and other family members, older women also often provide community care or assistance to community members. Apart from having a markedly lesser role in caring activities, elderly men are more likely to work and experience better economic well-being. Far more women than men report no source of income. Older men also have significantly higher mean incomes from all sources than older women. As a result, elderly women are more insecure than the men. Accessing services for older people also varies by gender. The women tend to participate more in community- based programs such as the *Poslansia* program and the National day for older people (*Hari Lanjut Usia*). However, elderly men tend to have more access to pension schemes than elderly women.

I argue that the social systems within the family, community and welfare systems govern the subjective experience of inequality in old age between elderly men and women. Family systems through the division of labour in the household contribute to inequalities between elderly men and women. The system in the family determining role-related activities and gender differences in opportunities, provides men and women with different and unequal resources, opportunities and exposure to risks and hazards. This family system arises from social and religious norms, defines the roles of women and men, the division of labour between them, responsibilities, obligations, rights and social sanctions. Elderly men are automatically seen as breadwinners and responsible for earning money, whereas women are responsible for domestic tasks such as cooking, preparing food, shopping, housekeeping, caring for ill family members and taking care of grandchildren. The dominant role of the daughter and wife and to some extent daughter-in-law in providing care shows the strongly gendered nature of caring and gender inequalities in caring. Elderly women are also often responsible for supporting their husbands in earning money, and this is often called a double burden as they have to do their best in the work force as well as domestic chores.

The gender-based distribution of work in the household contributes to affect women's health and wellbeing in older age. This study found that older persons who provide care are more likely to suffer poor physical health. Those older persons with caring responsibilities have significantly higher blood pressure than older persons without such responsibility. The role of women as a care provider for their husbands and their family exposes them to stress and hazards associated with caring, including walking long distances to fetch water and firewood, lifting and carrying heavy loads of water and firewood (manual handling), smoke from cooking activities, exposure to dust and fumes, to improper ventilation and exhaust systems in the kitchen, chemicals for washing clothes, repetitive bowing and bending. More exposure to caring hazards leads to health disparities between elderly men and women.

In addition to the family system, systems and norms in the community also contribute to inequality among men and women of the older generation. One of the aspects of the community systems is the risk of inequality in the rural working environment. The higher prevalence of disability and disease of elderly women may reflect increased hazards associated with their work. Two aspects of working environment might influence health inequality in later life, including working management and the ergonomic aspects of work. The first is working management. Elderly women are more likely to lift and carry heavy loads manually (manual handling) while the men are more likely to use bicycles or motorcycles for carrying a heavy load. Use of a bicycle or motorcycle of course minimizes fatigue and reduces exposure to the hazards of carrying heavy loads. Elderly men are more likely to have access to bicycles or motorcycles. In many cases, rural people have farms or orchards located a long distance from their village, and often in hilly areas with slippery pathways. Carrying loads on a slippery pathway is dangerous and a common cause of accidents and injury. The farms also often lack access to drinking water and sanitary sources.

The second aspect of the working environment is the ergonomic. Elderly women tend to work in a monotonous ergonomic position such as sitting long hours in the one position. The monotonous work may lead to increased fatigue due to continuous handling of loads, repetitive movements of both hands and wrists and awkward postures. In contrast, elderly men tend to work in more mobile and varied ergonomic postures like sitting, standing, bowing and walking. These ergonomic aspects are often influenced by the type of work performed. The community social system provides norms relating to the kinds of work regarded as appropriate for men and women. Working in production sectors such as weaving, making woven mats and food processing is appropriate for elderly women while working on a fish farm, a coconut plantation or furniture is appropriate for men.

Community norms also provide more opportunities for men to access education in their younger days. Therefore, elderly men have often achieved higher education levels than elderly women so that in turn the men have gained better access to employment opportunities in middle life and better access to pensions on retirement. Community norms also tend provide greater opportunity and resources in general for men than women. The way inheritance is divided in patrilineal communities for instance, is more likely to benefit men than women. The way of transferring wealth influences inequality in later life.

The community system also provides more opportunities for elderly men to access various leisure activities. A range of leisure activities conducted by elderly men includes fishing, arts, gambling, hanging out in coffee shops (*kedai kopi*), and playing chess, which are not always seen as appropriate for elderly women. The most common leisure activity for elderly women is watching television, of course typically inside the home. On the other hand, the majority of leisure activities for men is outside the home base. If men feel lonely or bored at home during the night, it is common and accepted if they go out and relax at security posts (staffed by local security personnel) while that would be regarded as totally inappropriate behaviour for elderly women. Culturally women do not sit around *kedai kopi*, this can disadvantage women in many ways as *kedai kopi* can be used as a socialising venue, as well as getting recent information, village development information, village news and job opportunity. The system in the community contributes to what is appropriate and inappropriate leisure activities for elderly men and women that in turn contribute to overall inequality in this generation.

The community norms, particularly in Muslim communities, also often dictate a separation of activity between men and women. It is common in Muslim communities that when

men and women engage in religious activity such as praying for family members who passed away (*tahlil and istigosah*) or conducting Islamic recitation (*pengajian* and *mujahadah*), they do so separately. As a result, some community-based programs for the elderly such as *Poslansia* and *Karang Werdha* are often only attended by elderly women as some men may feel too embarrassed to attend, as they regard it as an activity for women.

In addition to the community's "rules", the welfare system also contributes to ways in which distinctions are drawn between elderly men and women. The influence of the welfare system can be seen through the way programs for the elderly are organized and provided. The welfare system's influence can be seen from the composition of relevant government staff: all those responsible for the health of the older generation – such as midwives and health cadres – are women. Within the villages covered by this research, all *Puskesmas* staff working in the sector are also women. Health cadres and *Poslansia* cadres are generally also women. The welfare system's influence can also be seen in the requirements to access social assistance programs such as *home care, Aslut*, BKL and *PKH Lansia*. Those programs require the availability of care providers from the family, and the carers are very often female family members such as the wife, daughter or daughter-in-law. This system serves to perpetuate the role of women as care providers for their family, particularly older parents. The welfare system is thus also likely to contribute to inequality between elderly men and women.

To conclude, this finding contributes to knowledge and for the development of science particularly on social gerontology by showing how the system in the family, community and state levels is likely to produce inequalities between elderly men and women. This system indirectly places elderly women in a more vulnerable situation and greater insecurity in their old age. The social and religious norms construct the system which prevails in the family and the community. If the determinant of gender inequality in later life is the system, so a need arises to change social arrangements, and social intervention needs to address the underlying cultural and social factors that influence inequalities. It is essential to address the cultural and social factors is part of the efforts to fulfil the social rights of older persons.

8.2.3 Inequalities across ethnicity and region

Little research has been carried out on how differences in the cultural settings and regions contribute to differences in patterns of inequality in later life in rural Indonesia. This study contributes to knowledge on social gerontology as this study found that the unique institutional and social structures govern the subjective experience of aging across ethnicity and region. This study found that ethnicity and region are among the most significant and consistent predictors of inequality and vulnerability in old age. Javanese are substantially more likely to have better health compared to non-Javanese (Balinese, Sundanese, and Batak Toba). Older

people living outside Java are also more likely to experience economic disadvantage than those in Java.

There are three main reasons why older people living in the Javanese villages have substantially better health status and a lower likelihood of experiencing economic disadvantages; these are the norms and values among the Javanese, the kinship system and greater access to social protection and development programs. As for the category of norms and values, ethnicity provides a cultural context which will include values and norms with regard to being old, the relationship between the old and the young, and obligations and responsibilities toward older people (Niehof 1995). Cultural characteristics are significant in differentiating the ageing experience. The values of *pasrah* (surrender), *guyub* (togetherness), *rukun* (harmony), *semeleh* (leaning on God), *nrimo* (acceptance) among the Javanese influence their attitudes toward the difficulties and insecurity of old age. Those values also explain how community functions through responsibility.

The values of "guyub" (togetherness) and rukun (harmony), for instance, encourage people to gather with other people. This can be seen in levels of social participation which is more intense among Javanese than non-Javanese. Social participation levels have a strong association with health status and are an indicator of successful ageing. The guyub and rukun culture also operates through establishing "child migrant organizations" (paguyuban anak rantau) in the cities. All migrant adult children from Javanese villages in the research area have such organizations. These organizations usually contribute to the development of the home village. The paguyuban organizations often collect funds from their members and send them to needy village people, who are often the older persons in their village. Among the migrated children interviewed, those from villages in Java sent contributions back "home" for village development more frequently than migrated children from non-Javanese villages.

The *guyub* and *rukun* values also shape self-reliance among elderly Javanese who help to run social welfare programs for their own generation, for instance the *Posyandu Lansia-Poslansia*. To finance the program, the members do not rely on government support. The *Poslansia* program in Giriasih, for instance, develops community-based fundraising to run their programs. One aspect of the fundraising is collecting one thousand rupiah (around AUD 10 cents) per visit to the *Poslansia* program. The money is utilized to fund health checks and supplementary food for the members (*Program Makanan Tambahan*). The participation of older people from Javanese villages is much higher than older people from the non-Javanese villages.

In addition to the values, particular ethnic norms also impose responsibilities particularly caring responsibilities. In the Javanese bilateral kinship system male and female children have an equal position in certain respects. This kinship system is manifested in the likelihood that a daughter will support her parents financially in their old age. Daughters in bilateral communities are more likely to do this compared with patrilineal communities. Another example is the role of the sister. Both sisters and brothers can contribute as primary carers in the bilateral system even though it is less frequent. By contrast, the sister, at least to some extent, is not recognized as a caregiver in the patrilineal system. Though in patrilineal system son plays a dominant role in taking care of aged parents, nevertheless son share the majority of his care duties with his wife. Here again in patrilineal system, daughter in-law provide care for their parents in-law. All the dominant provider of care for the elderly are women.

The third aspect is unequal access by region to development programs and services for the elderly. The government has made efforts to fulfil the social rights of the elderly through social welfare programs that can be clustered into five areas including social assistance, social insurance, health services, empowerment, and awareness raising (through campaign and education). However, older people in Javanese villages are more likely to access those services and other development programs. Based on data from the Village Potency survey (*Potensi Desa-Podes*), all Javanese villages (Giriasih, Bughoarjo and Rejoagung) receive the National Program for Community Empowerment program (*Program Nasional Pemberdayaan Masyarakat Mandiri - PNPM Mandiri*) but the non-Javanese villages (Cacaban, Muara, and Gunung Sari) do not. The development process through social services might thus generate inequality across regions.

Beneficiaries of social protection programs such as the Family Hope Program for the elderly (*PKH Lansia*) and Social Assistance for Elderly (*Aslut*) are mostly older persons in Javanese villages. Moreover, elderly people living in Java have access to a greater variety of services which tend to be of a higher quality. This seems to reflect the orientation of the development programs which often focus on western Indonesia, while more thinly populated Eastern Indonesia is often left behind in terms of social welfare programs for the elderly. The unequal distribution of social welfare programs clearly influences levels of inequality in later life in rural Indonesia.

Decentralization might also contribute to the unequal access of service delivery for older people. One of the central government's requirements for implementing social assistance for the old is the preparedness of the local government to conduct the relevant programs. If the local government is not ready to implement a program, they might be excluded from the services. One of the concerns of the provincial and central governments is that they do not have the authority to provide direct services because, after decentralization, the district government acquired authority to convey these services to the people. On the other hand, most programs for older persons are initiated by the central government and a very small number of programs are initiated by local government. The approach of social programs initiated by local government is usually charity-based through basic food assistance and is often very small in scope.

8.2.4 Inequalities by social class

Social class measured by educational attainment, land possession and household income contribute to the subjective experience of inequality in old age. The elderly from high income families are significantly less likely to suffer disability and anxiety. Similarly, educated persons are less likely to experience vision and hearing problems. The likelihood of experiencing poverty in old age drops significantly according to increasing education level. Those who completed primary education and especially also secondary and upper education are significantly less likely to suffer from economic disadvantages than those who have no education or less than primary education. In addition to educational attainment, the ownership of farmland is a significant indicator of better economic outcomes. In agricultural areas, farmland is one of the most significant assets providing income for older people. In rural areas, family possession of farmland is a symbol of success for migrated children.

Indeed, the higher their educational attainment, the higher the likelihood that older people will access social services including pensions, health insurance and *Poslansia*. Lower educational attainment has a negative influence on the prospect of accessing the major social welfare programs for the elderly and of inclusion in social services. Owners of land are more likely to access health insurance, pension and food security programs. The likelihood that older people of a higher social class will access services indicates the unequal distribution of resources which is the main measure of inequality.

Accessing those programs is very important for the overall welfare of this group. Having a pension, for instance, is a substantial protective factor against experiencing economic disadvantages in old age. The elderly who receive pensions are significantly less likely to suffer economic disadvantage than those who do not. The word expressed by the elderly who have a pension is *"happy, relaxed, sufficient and feeling secure"*. It indicates that support through the pension system is a strategic arrangement to keep the elderly contented and provide economic security in their old age. Feeling secure is an essential determinant of quality of life during old age.

The inequality across social classes can also be seen in the economic behaviour of older persons. The elderly of a higher social class often continue working in their old age to keep themselves active and healthy, while the lower social class continued to work to survive and contribute to their family. For those of a higher social class, working is likely to be their exercise and a way to avoid fretting due to lack of activity. A significant number of interviewees insisted that their bodies would become painful if they failed to work as they used to. They might only stop working if they became too frail and thus physically unable to work. Economic activity has a strong association with economic disadvantages in older age. The elderly who are economically active are significantly more likely to maintain better economic wellbeing.

The findings above show that social class is strongly linked to inequality in old age. Older people from less-advantaged social classes are in a more vulnerable situation in their old age. One of the main causes of the inequality by social class is the system in the labour market and the social security system. This finding was filling the gaps in knowledge by showing that the system in the labour market and social security system contributes to inequality across social class. Social security schemes such as pensions, minimum wage and health insurance are often contributory, and informal workers, bearing in mind that the majority of them work in agricultural sectors, often cannot afford the contributions. It has been noted that two-thirds of the labour force in Indonesia are concentrated in informal sectors. This means that over 73 million people will potentially face poverty upon their retirement. The social protection system influences the exclusion of older persons from lower social class from accessing government programs which are often contributory.

Indeed, non-contributory schemes such as the social pension are very small in scope. The small coverage of social welfare programs for the elderly is caused by the lack of funding allocated for social protection programs. In 2017, the total investment of Indonesia's social protection system was 0.73 percent of GDP, and the social protection program for the elderly (and disability) was only 0.001 percent of GDP. This spending is very low relative to GDP (much lower than 1 percent), and is less than expected for a middle-income country like Indonesia, resulting in major gaps in coverage. Other countries, such as Nepal, have a much lower GDP than Indonesia but invest approximately 2 percent of GDP on social protection (TNP2K, 2018).

A report on government expenditures by the Ministry of Finance reported that the proportion of social spending on welfare for the elderly was very low at around 2.4 percent of the total social protection spending in 2011, and it dropped significantly to 1.7 percent in 2014. This proportion was much lower than spending on research for social protection, which stood at 5.3 percent of the total social protection spending in 2011 and at 2.3 percent in 2014 (Indonesian Expenditures, Ministry of Finance Report 2011 and 2014). The underfunding is also reflected in the amount allocated for *Aslut* in the Ministry of Social Affairs that was merely 0.53 percent of the central budget's social assistance pool. It indicates that a large number of older persons are excluded from any old age pension through either insurance or assistance.

A lack of spending on the poor is an indicator of failure of services (Devarajan & Reinikka, 2004). Social protection is relatively expensive and needs adequate policy design and sufficient funds, so this indeed presents an implementation challenge for developing and low-income countries. The mean cost of a basic package of social protection including a universal pension covering old age, disability and a child benefit, would amount to approximately two to three percent of GDP (Barrientos & Hulme 2008).

The limited funding and small coverage of social welfare programs for older persons also might indicate that they are a neglected segment of society due to lack of attention and are not a serious priority for the government of Indonesia. The government is evidently more focused on children. Policy of course is often driven by political ideology and economic choices, and the political ideology of policy makers seems at present to focus on investment. Children are seen as an investment for the future. The RPJMN 2020-2024 (Medium-Term National Development Plan), which is an important road map of policy development in Indonesia, shows that children, pregnant mothers and young people are the major concern of the government, and it contains no specific reference to older people. The absence of older persons as a development priority seems to influence the number of programs and budgets allocated to support older persons, particularly through non-contributory mechanisms. Moreover, the older generation was also excluded from the indicators of achievement in the official minimum service standards (*Standar Pelayanan Minimal-SPM*) for health services. The exclusion apparently occurred because the MDGs (Millennium Development Goals) at the time did not clearly mention elderly people.

Older persons from a higher social class can access various programs through contributory mechanisms which are mostly closed to lower social classes. The government's priority in designing programs and budget allocations shows how people are stratified by their age and social class. The stratification often leads to unequal treatment. O'rand (2018) maintained that age is a relatively persistent principle of stratification in developed countries. Government resources are allocated differently by age to the young and older people and by social class.

8.2.5 Existing long-term care arrangements in different socio-cultural settings and obstacles of social provision provided by the Indonesian Government

This study contributes to social gerontology by showing how care support is worked out in different socio-cultural settings in Indonesia and by gender, particularly in rural areas where high migration of young people to cities has occurred. The first point of enquiry is who is needing care. This study found that groups who need care are elderly women, unmarried women, those of higher age, those of a lower social class, and the elderly who have non-migrant children. These can be categorized as vulnerable as they need carers. The second point is who is providing care. Ethnicity and kinship systems play significant roles in determining this. Daughters-in-law are often reported as the main long-term care provider for dependent elderly in patrilineal communities, while daughters are often named as the main care provider in bilateral communities. The role of male family members, particularly husbands (older men) and sons are very significant in patrilineal communities, whereas in bilateral

kinship systems, the role of the husband seems very limited. Older women in patrilineal kinship systems often named their husband as their primary care giver, which is a much higher proportion than daughters or other female relatives.

The elderly who have no children and those who have migrant children (only) reported female family members as the main care providers. The elderly women from high income families more often reported the husband as the primary caregiver, differently from women from lower income households. Similarly, the role of children (both daughter and son) decreases as socio-economic status increases. This is partly caused by the living arrangements in which an elderly person is both more likely to live with spouse (only) as socioeconomic status increases, and in which children are less likely to co-reside with their parents in the same circumstances.

Although children are significant care providers for older people, around 14 percent of older people receive no support from children either practically, financially or emotionally. Factors like number of children, migrant status of children, disability levels and working status are strongly related to cases where older people are excluded from child support. The likelihood of lacking child support decreases significantly as the number of children rises. Older people with disabilities are significantly less likely to be excluded from child support. Those with migrant children (only) and those who are still active economically are more likely to be ignored by their children. This might be caused by the fact that older people are forced to work to fulfil their needs as their children in some extent are neglecting them.

The third point is how care operates. This study found that the more intimate were the activities needing care such as defecating and bathing, the less frequently elderly people allowed family members to assist with the task. In performing these tasks, the sex of the care provider was, not surprisingly, mostly the same as the elderly subject. Hence elderly women were usually helped by female family members; though elderly men tended to name their spouse as their caregiver. Caring and support for parents involved multiple family members and ranged through habitual care from family, small scale paid care from neighbours and children, community care and government's institutional care.

This study also contributes to social gerontology by showing how the negotiation of care is conducted. Care has to be negotiated and re-negotiated depending on various situational and contextual factors. Habitual care and small-scale paid care are examples of how care of the negotiation process. In the context of habitual care, providing a larger inheritance to children who care for their parents is a common practice in rural areas. This is part of the negotiating process of caring for older people. Paying all the costs for migrated children to return home to care for their parents is another example of negotiated care. The payment is not usually made by the parents but by the other migrated children who are not returning home.

This study also contributes to filling the gaps in knowledge by elaborating the significant role of the community in providing care in rural Indonesia. The role can be performed by some traditional institutions such as "nyumbang", "ngirimi makanan", zakat and sedekah, alms giving, and counselling. These practices are part of traditional social protection strategies of caring conducted at the community level. Such traditional social protection schemes play significant roles in the absence of formal social protection in rural communities. The traditional social protection strategy is part of the uniqueness and strength of community in rural Indonesia which might not normally be found in developed countries. This study also contributes to social gerontology by reflecting the implementation of social policy for older people. The role of government support in providing long term care for the elderly is however very limited. Although the Indonesian government has made efforts to fulfil the social rights of the elderly through social welfare programs that can be clustered into five clusters including social assistance, social insurance, health provision, empowerment, and awareness raising, those programs are very small in scope and underfunded. The Ministry of Social Affairs as the leading agency for social welfare programs for the elderly, for instance, has assisted only around 100 thousand persons each year out of 2.8 million who need assistance. The coverage of the pension program nationally was around 8 percent nationally and Aslut was around 0.2 percent, and these proportions are similar to the results yielded by the research sites (pensions 8.7 percent and Aslut 0.5 percent).

In addition to the small coverage, the lack of participation by older people themselves and the lack of program integration among the ministries responsible for social welfare programs imperil the long-term implementation of care programs. The implementation of the programs lacks integration as programs are mostly run separately by institutions. The coordination is conducted among those institutions regularly, but to some extent is less effective due to absenteeism and changing personnel attending the coordination meetings. Moreover, the meetings are often attended by lower-level staff who lack decision-making authority.

Poorly prepared and trained health care workers, particularly midwives also present a challenge for long term care programs for the elderly. The most common health services accessed by older people are services provided by midwives and paramedics (*Mantri*). The midwife usually manages *Polindes* (health services at village level) and *Poslansia* activity. Midwives are often unprepared to effectively manage the health care needs of older adults, as their training background is usually aimed at childcare and helping expectant mothers. They are rarely trained to work with older people and lack knowledge of health issues common in old age such as dementia, depression and frailty.

Another challenge is poor targeting. The phenomenon where some beneficiaries of social pensions (*PKH Lansia*) are in fact members of middle and higher-income families is an

example of poor targeting. Another example is the Rice for the Poor program (*Raskin*). Thirty percent of older persons who are relatively wealthy and 33.7 percent of older persons who completed secondary and higher education are receiving *Raskin*. This indicates poor targeting as *Raskin* was designed for low-income families. This finding confirms previous research on poor targeting of various programs which concluded that the targeting performance of various safety net and poverty programs was low, meaning that these programs were only slightly propoor. McCarthy and Sumarto (2018) are sceptical about the top-down approaches to the targeting of the social assistance programmes.

8.2.6 The role of financial support from children

The significant role of adult children in providing support for their parents is widely documented. One type of support is financial assistance. Children who had migrated are more likely to provide financial support (remittances) than non-migrant children. Financial support from children is perceived as one of the coping capacities available to help older persons facing daily hardships. However, little research has yet emerged on the role of children's financial support in relieving old-age poverty and supplementing the overall income of parents.

This study contributes to the advancement of knowledge on the role of financial assistance from children in relieving old-age poverty and overall income of parents. This study found just below 43 percent of older persons were receiving financial support from their children who had migrated. Contributions from children are reported most frequently as the major source of income among elderly people while income from renting farmland is the least common. However, the monthly mean income from child support is much lower than the monthly mean income from pensions and farming. This study also found no association between remittance levels and health status of the elderly. The role of children's financial support is also very limited in preventing poverty and as a main source of income in old age.

Another variable used to discern the association between financial support from children and economic wellbeing is the amount of financial support and overall income of older people excluding child transfers. Total personal income is calculated by summing up all income from various sources except transfers from children. The regression shows a negative association between financial support from children and the overall income of older people. This indicates that children are less likely to provide significant financial assistance to those parents who already have a regular or high personal income. Many of the older people prefer to work into their old age as they do not want to rely on children's support and to some extent financial support from children may be lacking. It was found that there is a significant association between the amount of financial support and the working status of older persons. They are significantly less likely to work as the amount of financial support for their parents but

to develop and provide an appropriate official support system. The increasing number of the older generation in Indonesia also needs to be considered in comprehensive efforts to prepare relevant support systems.

8.3 Policy implications

Population ageing requires urgent action. How and how much can government help?. There are some strategies to improve the quality of life and well-being of older people. The first is increasing public spending and coverage for social welfare programs; improving health care quantity and quality particularly in eastern part of Indonesia and retirement income security needs for older people is a key measure to reduce inequality in later life. It is the role and duty of government not to leave anyone behind, including older persons, if the Sustainable Development Goals (SDGs) are to be achieved. Leaving no-one behind is a basic principle in the SDGs agenda. The provision of adequate social protection programs, particularly caregiving programs, is vital to the achievement of the 2030 SDG Agenda and to guarantee healthy and productive lives for older persons. Social protection is relatively expensive and needs adequate policy design and sufficient funds. The mean cost of a basic package of social protection including a universal pension covering old age, disability and a child benefit, would amount to about two to three percent of GDP (Barrientos & Hulme, 2008). One of the strategies to increase the funding for social welfare policies for older people is mix funding from government (central, district and village government) and community. A good example is Jember District where the Bupati (regent) instructed all village heads to allocate six million Rupiah (around \$600) annually from their village fund to run direct services to older persons based on local needs. The village fund is one of the alternatives to finance the services to the elderly. The political will and the capacity of local government are key to the achievement of more equal services to older people.

Another way to ease the cost of providing social security for older persons is developing and mobilizing networks from United Nations, corporate social responsibilities of companies, and other non-government organizations. The collaboration between government and nongovernment institutions is tremendously important in solving limited budget issues and achieving crucial social goals like the welfare of elderly people in Indonesia. Corporate Social Responsibilities (CSR) of companies, for instance, has a large amount of funding to run development programs for communities. The government can facilitate and provide technical assistance to focus CSR programs on providing social welfare programs for the elderly. The government could also provide tax incentives or reductions for the companies that offer services for older persons.

The second is that pension reform and old age saving through social insurance scheme are among the strategic solutions to provide income support for the elderly. Chapter 6 reveals that pension schemes are one of the most influential protective factors in providing income support and preventing old-age poverty. Pensions also make a significant contribution to family networks. The high incidence of poverty among the elderly indicates an urgent need to broaden the scope of formal pensions into a social pension to cover those among the elderly who lack access to any social protection in old age. Increasing benefit of the National Health Insurance (JKN) to cover long term care is also a strategic solution particularly to prepare future old age for young people. Indonesian government need to consider life course approach as recommended by WHO, that solving problems for older people should start from a young age (early childhood) so that older people will be better off in their old age. The program should start with improving the quality of educational services for children. The government policy also should address the current young people through a social insurance scheme, promoting healthy lifestyle, education and training aimed to avoid poor health and poverty when they are getting older. For the current elderly, the scheme of social protection might include social assistance, social security, digital literation and developing telemedicine, telehealth and ecounselling services.

The third is increasing the retirement age and improving the working conditions of older people. Poor working conditions are likely to worsen the health of most workers, and especially older people (Chapter 4). There is a need to develop decent work strategies in agriculture for older people, as it has been discussed in the literature that agriculture is one of the most hazardous industries if occupational and health safety regulations are not observed. As noted in Chapter 4, agricultural work can be physically demanding, seasonally exhaustive, and sometimes the repetitive nature of work can cause a range of health problems. Workers in the agricultural sector also may be exposed to potentially dangerous machinery, vehicles, chemicals, livestock, and exposed to the extremes of weather, noise and dust. Providing occupational safety and health guidance and training for older persons is also essential to protect them from hazards associated with employment. If they work improperly, health issues arise that in turn increase health expenditures and adversely affect economic well-being. Workplace policies also should be restructured to allow people to work longer or through extending the retirement age for the elderly who are still productive, thereby fostering active ageing.

The fourth is increasing the coordination and integrating social services for older people based on the strength of each government institution. Currently, the existing social services for older people tend to be separated across institutions. The approach of services for older persons should be changed from add hock and separated services provided into integrated services and based on the strength of each government institution. For instance, *Bina keluarga*

lansia-BKL (Empowerment program for families with elderly) program conducted by the BKKBN can be integrated into Poslansia, PKH Lansia and Karang Werdha. One of the strengths of the BKKBN is awareness-raising about the care of older persons. The tool kit developed by BKKBN can be used in Poslansia and Karang Werdha activities. Another example is the Social Office's Permakanan (food voucher) program which could be used to collaborate with the healthy food programs in *Poslansia* as lack of funding is often one of the obstacles in providing healthy food. The *Permakanan* program can support the healthy food programs in *Poslansia* and simultaneously attract older people to attend *Poslansia*. Distributing noodles as part of the package in the *Permakanan* program might however not be beneficial for the elderly as noodles are not healthy food. Handled properly, program integration can provide a strategic breakthrough which could reduce the distribution of unhealthy food for older persons. Improving coordination among key stakeholder organizations is essential for program integration and program effectiveness. In practice, integrating services for older people is challenging. Therefore, the role of a case manager is tremendously essential in integrating services for older people. The case manager in developed countries often conducted by a social worker. Social workers are educated and trained as a case manager in delivering services needed by older people. In the Indonesian context, the social worker is organized under the Ministry of Social Affairs. Assigning social workers as a case manager in integrating services for older people is important for program integration. The case management can be done from the smallest level of government administration from sub-village, village, subdistrict, district and higher administration level.

The fifth is improving the participation of older persons in planning, designing and implementing social services for them. Older people have a right to be involved and consulted. They have a right to be heard and their participation is valuable. One of the main approaches conducted by the Ministry of Social Affairs is charity through *PKH lansia* and *Aslut* programs. These programs employ top-down approach and likely to triggers jealousy from older people who do not receive the services due to small coverage. Charity is likely to affect the dependency of beneficiaries on assistance in Indonesian context. Introducing a new paradigm through strengthening community development (community-based approach) is likely more beneficial instead of charity approach. Empowerment community to deliver services is in line with mainstream strategy conducted by various government institutions such as Ministry of Women and Child Protection and Ministry of Village, Development of Disadvantaged Regions and Transmigration.

The final consideration is improving the competencies and skills of health professionals including midwives and health cadres at the village level on such disciplines as gerontology, geriatrics and management of health conditions faced by the older population such as frailty, osteoporosis, arthritis, depression and dementia. It is important to include those competencies

and skills in schools or higher education curricula for health professionals. Geriatric specialists with the expertise to treat complex cases should also be placed in hospitals in the regions where the percentage of older persons is high, though this is no doubt a longer-term aspiration. Improving the skill and knowledge of caregivers both from family and outside the family is tremendously important. The majority of caregivers are family members who often do not have adequate knowledge in providing care, especially personal/intimate care.

8.4 Study limitation

Every research has limitations, and there are four main limitations to this study. The first is that this study cannot capture the changing situation and behaviour of older people over a period of time. The 2016 Ageing in Rural Indonesian Survey (ARIS) is a cross sectional study. Therefore, the use of longitudinal data can enrich the insights derived from this current study particularly on the behaviours and factors associated with the changing political, social and community situation relevant to the problems of the older generation. The second is that the data gathered between late 2015 to early 2017 might not capture recent policy as government policy in Indonesia is changing fast. For instance, during data collection in 2016, there was no information on the Family Hope Program for the elderly, but when the researcher returned to the villages and interviewed some government staff, I found the program was being implemented. The third is that this study was conducted in only six villages. The six villages might not describe the overall situation of older people in Indonesia, although some of the study's conclusions do seem similar to evidence available elsewhere. The fourth is that this study does not examine the situation of older people during and after the emergence of the Covid-19 pandemic, which obviously poses some further very serious dangers to vulnerable groups like the elderly in all countries, including Indonesia. This study conducted before Covid-19 pandemic. Examining the situation of older people in rural areas during and after the emergence of the Covid-19 pandemic need to be studied further. The fifth is that this study only employs ADLs measures to identify the disability and need for care among older people. I noted that older people themselves stated that functional capacity includes broader roles and activities such as the ability to worship God, being able to do daily activities, being able to work and capacity to give financial assistance to grandchildren. Future work should consider how these broader roles and activities should be included in the quantitative analysis.

References

- Abikusno, N. (2007). Older population in Indonesia: trends, issues and policy responses: UNFPA Indonesia and Country Technical Services Team for East and South-East Asia.
- Abikusno, N., Haque, Z., & Giridar, G. (2007). Older Population in Indonesia: *Trends*. Paper presented at the Issues and.

Abramson, C. M. (2015). *The end game*: Harvard University Press.

- Achenbaum, W. A. (2001). Productive aging in historical perspective. *Productive aging: Concepts and challenges*, 19-36.
- Adioetomo, S. M., Howell, F., McPherson, A., & Priebe, J. (2013). Social Assistance for the Elderly in Indonesia: An Empirical Assessment of the Asistensi Sosial Lanjut UsiaTerlantarProgramme. Jakarta: Tim Nasional Percepatan Penanggulangan Kemiskinan (TNP2K).
- Adioetomo, S. M., & Mujahid, G. (2014). *Indonesia on the threshold of population ageing*. Jakarta, Indonesia: United Nations Population Fund (UNFPA) Indonesia
- Adlakha, A., & Rudolph, D. J. (1994). Aging trends: Indonesia. *Journal of cross-cultural gerontology*, 9(1), 99.
- Agree, E. M., Biddlecom, A. E., & Valente, T. W. (2005). Intergenerational transfers of resources between older persons and extended kin in Taiwan and the Philippines. *Population Studies*, *59*(2), 181-195.
- Agunbiade, O. M., & Akinyemi, A. I. (2017). Neoliberalism and Resilience Among Older Yoruba People in a Semiurban Community, South West Nigeria. In *Cross-Cultural and Cross-Disciplinary Perspectives in Social Gerontology* (pp. 85-107): Springer.
- Allin, P., & Hand, D. J. (2014). *The Wellbeing of Nations: Meaning, motive and measurement*: John Wiley & Sons.
- Ananta, A. (2012). Financing Indonesia's Ageing Population. Southeast Asian Affairs, 2012(1), 135-149.
- Ananta, A., & Arifin, E. N. (2009). Older persons in Southeast Asia: From liability to asset. In *Older persons in Southeast Asia: an emerging asset* (pp. 3-46): Institute of Southeast Asian Studies.
- Ananta, A., Arifin, E. N., & Bakhtiar. (2005). Ethnicity and ageing in Indonesia, 2000–2050. Asian Population Studies, 1(2), 227-243.
- Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults: Evaluation of a short form of the CES-D. *American journal of preventive medicine, 10*(2), 77-84.
- Andrews, G. (1992). Research directions in the region: past present and Future. In D. R. Philips (Ed.), *Aging in east and south east asia*. London: Edward Arnold.
- Andrews, G. R., & Hennink, M. M. (1992). The circumstances and contributions of older persons in three Asian countries: preliminary results of a cross-national study. *Asia-Pacific Population Journal*, 7(3), 127-146.
- Antman, F. M. (2010). Adult child migration and the health of elderly parents left behind in Mexico. *American Economic Review, 100*(2), 205-208.
- Arifin, E. N. (2006). Living Arrangements of Older Persons in East Java, Indonesia. *Editorial Advisory Board, 21*(3), 93.
- Arifin, E. N., & Ananta, A. (2016). The past three population censuses: A deepening ageing population in Indonesia. In *Contemporary Demographic Transformations in China, India and Indonesia* (pp. 309-323): Springer.
- Armstrong, P., & Kits, O. (2004). One hundred years of caregiving. *Caring for/caring about: Women, home care and unpaid caregiving*, 45-73.

- Asis, M. M. B., Domingo, L., Knodel, J., & Mehta, K. (1995). Living arrangements in four Asian countries: A comparative perspective. *Journal of cross-cultural* gerontology, 10(1-2), 145-162.
- Asmussen, V. (2004). Constructing gender and local morality: exchange practices in a Javanese village. *Indonesia and the Malay World*, *32*(94), 315-329.
- Atwal, A., & McIntyre, A. (2013). *Occupational therapy and older people*: Wiley Online Library.
- Babbie, E. R. (2015). The practice of social research: Nelson Education.
- Banwell, C. (2013). *Gendered bodies and obesity*. Paper presented at the Gender and population seminar, Canberra.
- Barrientos, A. (2006). Cash transfers for older people reduce poverty and inequality. Background paper for the World Development Report.
- Barrientos, A., Gorman, M., & Heslop, A. (2003). Old age poverty in developing countries: contributions and dependence in later life. *World development, 31*(3), 555-570.
- Barrientos, A., & Hulme, D. (2008). Social protection for the poor and poorest: An introduction. In *Social protection for the poor and poorest* (pp. 3-24): Springer.
- Beard, V. A., & Kunharibowo, Y. (2001). Living arrangements and support relationships among elderly Indonesians: Case studies from Java and Sumatra. *International Journal of Population Geography*, *7*(1), 17-33.
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of political economy, 70*(5, Part 2), 9-49.
- Belo, J. (1953). Bali: temple festival (Vol. 22): JJ Augustin.
- Benedict, R. (2005). *The chrysanthemum and the sword: Patterns of Japanese culture*: Houghton Mifflin Harcourt.
- Bengtson, V. L., & Settersten Jr, R. (2016). *Handbook of theories of aging*: Springer Publishing Company.
- Bengtsson, T. (2010). *Population ageing-a threat to the welfare state?: the case of Sweden*: Springer Science & Business Media.
- Beresford, P. (2005). Redistributing profit and loss: the new economics of the market and social welfare. *Critical Social Policy*, *25*(4), 464-482.
- Biddlecom, A., Chayovan, N., & Ofstedal, M. B. (2002). I ntergenerational support and transfers—which commonly take the forms. *The well-being of the elderly in Asia: A four-country comparative study*, 185.
- Binelli, C., Loveless, M., & Whitefield, S. (2015). What is social inequality and why does it matter? Evidence from Central and Eastern Europe. *World Development*, *70*, 239-248.
- Bird, C. E., & Rieker, P. P. (1999). Gender matters: an integrated model for understanding men's and women's health. *Social Science & Medicine, 48*(6), 745-755.
- Bongaarts, J., & Zimmer, Z. (2002). Living arrangements of older adults in the developing world: an analysis of demographic and health survey household surveys. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *57*(3), S145-S157.
- Booth, H. (2017). The process of population ageing and its challenges. In *Routledge handbook of Asian demography* (pp. 431-455): Routledge.
- BPS. (2014). Statistik penduduk lanjut usia. Katalog BPS, 4104001.
- BPS. (2020a). Angka Harapan Hidup (AHH) menurut Provinsi dan Jenis Kelamin, 2010-2018. Retrieved from <u>https://www.bps.go.id/dynamictable/2016/01/08%2000:00/1114/-ipg-</u> <u>angka-harapan-hidup-ahh-menurut-provinsi-dan-jenis-kelamin-2010-</u> <u>2017.html</u>
- BPS. (2020b). Indeks Pembangunan Manusia Menurut Provinsi [Metode Baru], 2010-2019. Retrieved from

https://www.bps.go.id/dynamictable/2020/02/18/1772/indeks-pembangunanmanusia-menurut-provinsi-metode-baru-2010-2019.html

- BPS. (2020c). Persentase Penduduk Miskin Menurut Provinsi 2007 2019. Retrieved from <u>https://www.bps.go.id/dynamictable/2016/08/18%2000:00:00/1219/persentas</u> <u>e-penduduk-miskin-menurut-provinsi-2007---2019.html</u>
- Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annu. Rev. Public Health, 27*, 167-194.
- Butler, R. N., & Gleason, H. P. (1985). *Productive aging*: Springer Pub. Co.
- Byun, S.-y., Schofer, E., & Kim, K.-k. (2012). Revisiting the role of cultural capital in East Asian educational systems: The case of South Korea. *Sociology of education*, *85*(3), 219-239.
- Cacioppo, J. T., Hawkley, L. C., & Berntson, G. G. (2003). The anatomy of loneliness. *Current directions in psychological science*, *12*(3), 71-74.
- Cahyadi, N. (2017). Distance Matters: Upward and Downward Exchange of Support between Elderly and Migrant and Nonmigrant Children in Rural Indonesia. (Master Thesis). The Australian National University, Canberra.
- Cahyo, A. N. (2018). *Psychological distress and anxiety among Elderly in Ruural Indonesia.* (Master Degree Master thesis). The Australian National University, Canberra.
- Callahan, D. (1973). The WHO definition of health'. Hastings Center Studies, 77-87.
- Cameron, L., & Suarez, D. C. (2017). Disability in Indonesia: What can we learn from the data. *Australia Indonesia Partnership for Economic Governance, Monash University & Australian Government*.
- Canonge, J., & De, L. (2019). Universal Social Pension for an Ageing Population. In I. Ortiz, V. Schmitt, & L. De (Eds.), *100 years of Social Protaction: the road to universal social protection systems and floors*. Geneva: International Labour Organization.
- Cao, J., & Rammohan, A. (2016). Social capital and healthy ageing in Indonesia. BMC Public Health, 16(1), 631.
- Chafetz, J. S. (2006). *Handbook of the Sociology of Gender*: Springer Science & Business Media.
- Chan, A. (1997). How do parents and children help one another?: socioeconomic determinants of intergenerational transfers in Peninsular Malaysia.
- Chao, E.-C. (2017). *Entangled Pieties: Muslim-Christian Relations and Gendered Sociality in Java, Indonesia*: Springer.
- Chappell, N. L. (1991). Living arrangements and sources of caregiving. *Journal of Gerontology*, *46*(1), S1-S8.
- Chiu, E. (2008). Ageing in Asia. Ageing International, 32(4), 257-257.
- Chou, K.-L., & Chi, I. (2002). Successful aging among the young-old, old-old, and oldest-old Chinese. *The International Journal of Aging and Human Development*, *54*(1), 1-14.
- Choudhury, S. (1997). *Life-cycle aspects of poverty among older women*: Social Security Administration, Office of Research, Evaluation, and Statistics.
- Council, N. R. (2003). *Elder mistreatment: Abuse, neglect, and exploitation in an aging America*: National Academies Press.
- Crandall, R. C. (1991). *Gerontology: A behavioral science approach* (Vol. 13): McGraw-Hill Humanities, Social Sciences & World Languages.
- Crystal, S., & Shea, D. (2003). Annual Review of Gerontology and Geriatrics, Volume 22, 2002: Economic Outcomes in Later Life: Public Policy, Health and Cumulative Advantage: Springer Publishing Company.
- Darity, W. (2008). International Encyclopedia of the Social Sciences etroit: Macmillan Reference USA. *Sv "Agriculture Economics." By J. Mohan Rao*.
- De Jong, W. (2005). Ageing in insecurity: case studies on social security and gender in India and Burkina Faso (Vol. 5): LIT Verlag Münster.

de Leon, C. F. M. (2005). Social engagement and successful aging. *European Journal of Ageing*, *2*(1), 64-66.

De Vaus, D. A. (2002). Social surveys (Vol. 2): Sage.

- Delor, F., & Hubert, M. (2000). Revisiting the concept of 'vulnerability'. *Social Science & Medicine, 50*(11), 1557-1570.
- Devarajan, S., & Reinikka, R. (2004). Making services work for poor people. *Journal* of African economies, 13(suppl_1), i142-i166.
- Do-Le, K. D., Raharjo, Y., Graha–LIPI, W., & Subroto, F. J. G. (2002). Communitybased support for the elderly in Indonesia: the case of PUSAKA. *Southeast Asia's Population In A Changing Asian Context, (June)*, 10-14.
- Dong, X., Zhang, M., & Simon, M. A. (2014). The expectation and perceived receipt of filial piety among Chinese older adults in the Greater Chicago area. *Journal of Aging and Health, 26*(7), 1225-1247.

Douglas, E. (2002). Qualitative analysis: practice and innovation: Taylor & Francis.

- Doyal, L., & Gough, I. (1991). A theory of human need: Macmillan International Higher Education.
- Driedger, L., & Chappell, N. L. (2014). *Aging and ethnicity: Toward an interface:* Butterworth-Heinemann.
- Drummond, M. J. (2005). Men's bodies: Listening to the voices of young gay men. *Men and masculinities*, 7(3), 270-290.
- Eeuwijk, V. P. (2003). Urban elderly with chronic illness: local understandings and emerging discrepancies in North Sulawesi, Indonesia. *Anthropology & Medicine*, *10*(3), 325-341.
- Fahrudin, A. (2012). Fenomena bunuh diri di gunung kidul: Catatan tersisa dari lapangan. *Sosio Informa, 17*(1).
- Fanany, R., & Fanany, I. (2018). *The Elderly Must Endure: Ageing in the Minangkabau Community in Modern Indonesia*: ISEAS-Yusof Ishak Institute.
- Fillenbaum, G. G., & Smyer, M. A. (1981). The development, validity, and reliability of the OARS multidimensional functional assessment questionnaire. *Journal of Gerontology*, *36*(4), 428-434.
- Flick, U. (2018). An introduction to qualitative research: Sage Publications Limited.
- Fors, S., Lennartsson, C., & Lundberg, O. (2008). Health inequalities among older adults in Sweden 1991-2002. *Eur J Public Health, 18*(2), 138-143. doi:10.1093/eurpub/ckm097
- Fox, T. (2004). Corporate Social Responsibility and Development: In quest of an agenda. *Development*, 47(3), 29-36.
- Frankenberg, E., Chan, A., & Ofstedal, M. B. (2002). Stability and change in living arrangements in Indonesia, Singapore, and Taiwan, 1993-99. *Population Studies, 56*(2), 201-213.

Froggatt, A. (1990). Professional, Public and Personal. In *Family Work with Elderly People* (pp. 118-126): Springer.

- Gangapersad, V., & Pino, A. (2019). Universal Pension and Care for Elderly People. In I. Ortiz, V. Schmitt, & L. De (Eds.), *100 years of social protection: the road to universal social protection systems and floors*. Geneva: International Labour Organization.
- Garrad, J., & Bennett, A. (1971). A validated interview schedule for use in population surveys of chronic disease and disability. *British journal of preventive & social medicine, 25*(2), 97.
- Gavrilov, L. A., & Heuveline, P. (2003). Aging of population. *The encyclopedia of population*, *1*, 32-37.
- Geertz, C. (1959). Form and variation in Balinese village structure. *American anthropologist, 61*(6), 991-1012.
- Geertz, C. (1973). The interpretation of cultures (Vol. 5019): Basic books.
- Geertz, H. (1989). *The Javanese family: A study of kinship and socialization*: Waveland Pr Inc.

Gibson, L. (2017). Towards a More Equal Indonesia: How the government can take action to close the gap between the richest and the rest: Oxfam.

Gilleard, C., & Higgs, P. (2010). Aging without agency: Theorizing the fourth age. *Aging & mental health, 14*(2), 121-128.

Glass, T. A., De Leon, C. M., Marottoli, R. A., & Berkman, L. F. (1999). Population based study of social and productive activities as predictors of survival among elderly Americans. *Bmj*, *319*(7208), 478-483.

Gough, I., Bradshaw, J., Ditch, J., Eardley, T., & Whiteford, P. (1997). Social assistance in OECD countries. *Journal of European social policy*, 7(1), 17-43.

Gray, E. (2000). *Employment, age and children: How do they affect the division of household labour?* : Citeseer.

Grbich, C. (2007). Qualitative data analysis: An introduction. In: London: Sage.

Grbich, C. (2012). Qualitative data analysis: An introduction: Sage.

Gruescu, S. (2007). Population ageing and economic growth: education policy and family policy in a model of endogenous growth: Springer Science & Business Media.

Grundy, E. (2006). Ageing and vulnerable elderly people: European perspectives. *Ageing & Society, 26*(1), 105-134.

Gubhaju, B., Utomo, A. J., Mcdonald, P., & Utomo, I. D. (2019). *Who Cares? Older People and Their Carers in Rural Indonesia*. The Australian National University. Canberra.

Hall, B., & Scragg, T. (2012). Social work with older people: Approaches to personcentred practice: McGraw-Hill Education (UK).

Hanley, R. J., Alecxih, L. M. B., Wiener, J. M., & Kennell, D. L. (1990). Predicting elderly nursing home admissions: results from the 1982-1984 National Long-Term Care Survey. *Research on Aging*, *12*(2), 199-228.

Harris, J., & Tanner, D. (2007). Working with Older People: Routledge.

Hausman, D., McPherson, M., & Satz, D. (2016). *Economic analysis, moral philosophy, and public policy*: Cambridge University Press.

Health, C. o. S. D. o. (2008). Closing the gap in a generation: health equity through action on the social determinants of health: final report of the commission on social determinants of health.

Health, M. R. (2015). *Situasi Lanjut Usia (Lansia) di Indonesia*. Jakarta: Pusat Data dan Informasi Kementerian Kesehatan RI.

Heise, L., & Cislaghi, B. (2016). Measuring Gender-related Social Norms.

Henn, M., Weinstein, M., & Foard, N. (2005). A short introduction to social research: Sage.

Henning-Smith, C. (2016). Quality of life and psychological distress among older adults: The role of living arrangements. *Journal of Applied Gerontology*, *35*(1), 39-61.

Hermalin, A. I. (2010). *The well-being of the elderly in Asia: A four-country comparative study*: University of Michigan Press.

Hermalin, A. I. (2014). *The well-being of the elderly in Asia: A four-country comparative study*: University of Michigan Press.

Hermalin, A. I., Ofstedal, M. B., & Mehta, K. (2002). The vulnerable and their potential disadvantages. *The well-being of the elderly in Asia: A four country comparative study*, 461-518.

Heslop, M. (2002). *Participatory research with older people: A sourcebook*: HelpAge International.

Hill, T. (2015). Family caregiving in aging populations: Springer.

Hochschild, A. (1989). The second shift. New York: Avon.

Hokenstad Jr, M. C. T., & Restorick Roberts, A. (2011). International policy on ageing and older persons: Implications for social work practice. *International Social Work*, *54*(3), 330-343.

Hugo, G. (2000). 16 Lansia—elderly people in Indonesia at the turn of the century. *Ageing in the Asia-Pacific region: Issues, policies and future trends, 2*, 299.

- Hull, T. H., & Dasvarma, G. L. (1988). Fertility Trends in Indonesia 1967–1985. Bulletin of Indonesian Economic Studies, 24(1), 115-122.
- Hull, T. H., & Hartanto, W. (2009). Resolving contradictions in Indonesian fertility estimates. *Bulletin of Indonesian Economic Studies, 45*(1), 61-71.
- Hurd, M. D. (1990). Research on the elderly: Economic status, retirement, and consumption and saving. *Journal of economic literature, 28*(2), 565-637.
- Ihromi, T. O. (1994). Inheritance and equal rights for Toba Batak daughters. *Law and Society Review*, 525-537.
- ILO. (2008). *Direct Beneficiary Monitoring and Reporting* Jakarta: International Labour Organization.
- The welfare of elder persons, 13 C.F.R. (1998).
- Indrizal, E. (2004). Problems of elderly without children: a case study of the matrilineal Minangkabau, West Sumatra. *Ageing Without Children: European and Asian Perspectives on Elderly Access to Support Networks*, 49-76.
- Jehoel-Gijsbers, G., & Vrooman, C. (2008). Social exclusion of the elderly: a comparative study of EU member states.
- Johar, M., & Maruyama, S. (2011). Intergenerational cohabitation in modern Indonesia: filial support and dependence. *Health Economics*, *20*(S1), 87-104.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, *33*(7), 14-26.
- Johnson, R. J., & Wolinsky, F. D. (1993). The structure of health status among older adults: disease, disability, functional limitation, and perceived health. *Journal* of health and social behavior, 105-121.
- Jones, G. W. (2016). Ageing in China, India and Indonesia: an Overview. In *Contemporary Demographic Transformations in China, India and Indonesia* (pp. 325-328): Springer.
- Kadar, K. S., Francis, K., & Sellick, K. (2013). Ageing in Indonesia–health status and challenges for the future. *Ageing International*, *38*(4), 261-270.
- Kahf, M. (1999). The principle of socio-economic justice in the contemporary Fiqh of Zakah. *IQTISAD Journal of Islamic Economics, 1*(1), 24-44.
- Kahn, R. L., & Juster, F. T. (2002). Well–Being: concepts and measures. *Journal of Social Issues, 58*(4), 627-644.
- Kandal, T. R. (1988). The woman question in classical sociological theory.
- Katz, S. (1983). Assessing self-maintenance: activities of daily living, mobility, and instrumental activities of daily living. *Journal of the American Geriatrics Society, 31*(12), 721-727.
- Katz, S., Downs, T. D., Cash, H. R., & Grotz, R. C. (1970). Progress in development of the index of ADL. *The gerontologist, 10*(1_Part_1), 20-30.
- Kaufman, S. R. (1994). Old age, disease, and the discourse on risk: geriatric assessment in US health care. *Medical Anthropology Quarterly, 8*(4), 430-447.
- Keasberry, I. N. (2001). Elder care and intergenerational relationships in rural Yogyakarta, Indonesia. *Ageing & Society, 21*(5), 641-665.
- Kempen, G. I., & Suurmeijer, T. P. (1990). The development of a hierarchical polychotomous ADL-IADL scale for noninstitutionalized elders. *The gerontologist*, *30*(4), 497-502.
- Kerbo, H. R. (1983). Social Stratification and Inequality. *MeGraw-Hill, New York*.
- Kivett, V. R. (1985). Consanguinity and kin level: Their relative importance to the helping network of older adults. *Journal of Gerontology*, *40*(2), 228-234.
- Knodel, J., Chayovan, N., & Siriboon, S. (1992). The impact of fertility decline on familial support for the elderly: An illustration from Thailand. *Population and Development Review*, 79-103.

Knodel, J., & Debavalya, N. (1997). Living arrangements and support among the elderly in South-East Asia: anintroduction. *Asia-Pacific Population Journal*, *12(4)*, 5–16.

Knodel, J., & Ofstedal, M. B. (2003). Gender and aging in the developing world: Where are the men? *Population and Development Review*, 29(4), 677-698.

Koentjaraningrat. (1957). A preliminary description of the Javanese kinship system (Vol. 4): Yale University, Southeast Asia Studies.

Kohli, M., & Arza, C. (2011). The political economy of pension reform in Europe. In *Handbook of aging and the social sciences* (pp. 251-264): Elsevier.

Kramarow, E. A. (1995). The elderly who live alone in the United States: Historical perspectives on household change. *Demography*, *32*(3), 335-352.

Kreager, P. (2006). Migration, social structure and old-age support networks: a comparison of three Indonesian communities. *Ageing & Society, 26*(1), 37-60.

Kreager, P., & Schröder-Butterfill, E. (2007). Gaps in the family networks of older people in three Indonesian communities. *Journal of cross-cultural gerontology, 22*(1), 1-25.

Kreager, P., & Schröder-Butterfill, E. (2015). Differential impacts of migration on the family networks of older people in Indonesia: A comparative analysis. In *Transnational labour migration, remittances and the changing family in Asia* (pp. 165-193): Springer.

Kusumaningrum, D., Aidulsyah, F., & Meilianna, R. (2020). Tiga alasan mengapa Kartu Prakerja hanya memihak pada masyarakat perkotaan dan solusinya. *The Conversation*. Retrieved from <u>https://theconversation.com/tiga-alasanmengapa-kartu-prakerja-hanya-memihak-pada-masyarakat-perkotaan-dansolusinya-138425</u>

Kutanegara, P. M. (2002). Peran dan makna sumbangan dalam masyarakat pedesaan Jawa. *Populasi, 13*(2).

Lestari, S. (2014). The tradition to donate among women in Javanese rural areas: Reciprocity, food exchange and monetization. *International Journal of Sociology and Anthropology, 6*(7), 205-213.

Levitas, R., Pantazis, C., Fahmy, E., Gordon, D., Lloyd-Reichling, E., & Patsios, D. (2007). The multi-dimensional analysis of social exclusion.

Liamputtong, P., & Ezzy, D. (2005). *Qualitative research methods. Second*: Melbourne: Oxford university press.

Lindland, E., Fond, M., Haydon, A., & Kendall-Taylor, N. (2015a). Gauging aging: Mapping the gaps between expert and public understandings of aging in America. *Washington, DC: FrameWorks Institute*.

Lindland, E., Fond, M., Haydon, A., & Kendall-Taylor, N. (2015b). Nature doesn't pay my bills. *Mapping the gaps between expert and public understandings of urban nature and health*.

Lloyd-Sherlock, P. (2004). *Living longer: Ageing, development and social protection*: Zed books.

Lloyd-Sherlock, P. (2006). Identifying vulnerable older people: insights from Thailand. *Ageing & Society, 26*(1), 81-103.

Löwe, B., Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical care*, 266-274.

Macintyre, S., Hunt, K., & Sweeting, H. (1996). Gender differences in health: are things really as simple as they seem? *Social Science & Medicine, 42*(4), 617-624.

Mackenzie, C., Rogers, W., & Dodds, S. (2014). *Vulnerability: New essays in ethics and feminist philosophy*: Oxford University Press.

- Mahi, B. R. (2010). Intergovernmental relations and decentralization in Indonesia: new arrangements and their impacts on local welfare. *Economics and Finance in Indonesia, 58*(2), 149-172.
- Maneerat, S., Isaramalai, S.-a., & Boonyasopun, U. (2011). A conceptual structure of resilience among Thai elderly. *The Journal of Behavioral Science*, 6(1), 24-40.
- Martin, L. G., & Kinsella, K. (1994). Research on the demography of aging in developing countries. *Demography of aging*, 356-403.
- Maslow, A., & Lewis, K. (1987). Maslow's hierarchy of needs. Salenger Incorporated, 14, 987.
- Mason, A. (2007). *Demographic dividesnds: the past, the present, and the future:* na.
- Mason, E. S. (1995). Gender differences in job satisfaction. *The Journal of Social Psychology*, *135*(2), 143-151.
- Mason, K. O. (1995). *Gender and demographic change: What do we know?* : International Union for the Scientific Study of Population Liege, Belgique.

Mattson, P. H. (1982). Holistic health in perspective.

- McCarthy, J., & Sumarto, M. (2018). Social Protection Program in Indonesia: Understanding the Politics of Distribution. *Journal of Southeast Asian Economies*, 35(2), 223.
- McDonald, P., Son, V. B., Utomo, I. D., Utomo, A. J., & Hull, T. H. (2016). A Longitudinal Study of Poverty Among Young Adults in Greater Jakarta Between 2009–2010 and 2013–2014. Paper presented at the 2016 Annual Meeting.
- McGovern, P., & Nazroo, J. Y. (2015). Patterns and causes of health inequalities in later life: a Bourdieusian approach. *Sociology of Health & Illness, 37*(1), 143-160.

McLeod, S. (2007). Maslow's hierarchy of needs. Simply psychology, 1.

- Mehio-Sibai, A., Beydoun, M. A., & Tohme, R. A. (2009). Living arrangements of ever-married older Lebanese women: Is living with married children advantageous? *Journal of cross-cultural gerontology, 24*(1), 5-17.
- Metwally, M. (1986). The effect of the religious tax of zakah on investment in an Islamic economy. *Humanomics*, 2(2), 43-55.
- Midgley, J. (1995). Social development: The developmental perspective in social welfare: Sage.

Milne, P. (2006). Making the New Indonesia Work for the Poor: World Bank.

- Mincer, J. (1962). Labor force participation of married women: A study of labor supply. In *Aspects of labor economics* (pp. 63-105): Princeton University Press.
- Minichiello, V., Aroni, R., Timewell, E., & Alexander, L. (1995). In-depth interviewing. In: Sydney: Longman.
- Mogil, J. S., & Bailey, A. L. (2010). Sex and gender differences in pain and analgesia. In *Progress in brain research* (Vol. 186, pp. 140-157): Elsevier.
- Moody, H. R. (2005). From successful aging to conscious aging. *Successful aging through the life span: Intergenerational issues in health*, 55-68.
- Moreland, S., Smith, E., & Sharma, S. (2010). World population prospects and unmet need for family planning. *Washington, DC: Futures Group, 62*.
- Moser, C. O. (1998). The asset vulnerability framework: reassessing urban poverty reduction strategies. *World development, 26*(1), 1-19.
- Mujahid, G., Pannirselvam, J., & Dodge, B. (2008). The impact of social pensions: Perceptions of Asian older persons.
- Muliati, I. (2013). *Pension reform experience in Indonesia.* Paper presented at the World Bank, prepared for IMF conference "Designing Sustainable and Equitable Pension Systems in Asia in the Post Crisis World", www. imf. org/external/np/seminars/eng/2013/oapfad/pdf/muliati ppr. pdf.

- Nakatani, A. (2003). Ritual as' work': The invisibility of women's socio-economic and religious roles in a changing Balinese society. In *Inequality, crisis and social change in Indonesia: the muted worlds of Bali* (pp. 119-143): RoutledgeCurzon Taylor & Francis Group.
- Nations, U. (2010). *World Population Prospect: The 2010 Revision*. New York: Department of Economic and Social Affairs, Population Division.
- Neuman, L. W. (2011). Social research methods: qualitative and quantitative approaches (7th ed.). Boston: Pearson.
- Ng, N., Hakimi, M., Byass, P., Wilopo, S., & Wall, S. (2010). Health and quality of life among older rural people in Purworejo District, Indonesia. *Global health action*, *3*(1), 2125.
- Niehof, A. (1995). Ageing and the elderly in Indonesia: identifying key issues. *Bijdragen tot de Taal-, Land-en Volkenkunde*(3de Afl), 422-437.
- Niu, S., & Kogi, K. (2012). Ergonomic checkpoints in agriculture. *Geneva* (*Switzerland*): *International Labour Office*, 234.
- Noveria, M. (2015). Grandchildren caregiving: Elderly support for the family (A case study in some international migrant sending areas in West Java). *Journal of Population Ageing*, *8*(3), 187-202.
- O'rand, A. (2018). Age and inequality: Diverse pathways through later life: Routledge.
- OECD. (2019). Social Protection System Review of Indonesia. Paris: OECD Publishing.
- Patunru, A. A., McCulloch, N., & Von Luebke, C. (2009). A Tale of Two Cities: The Political Economy of Local Investment Climate in Solo and Manado, Indonesia 1. *IDS Working Papers, 2009*(338), 01-43.
- Pertiwi. (2018, 28 January 2018). Pasangan Lansia di Magelang Ditemukan Meninggal Mengenaskan News. *Detiknews*. Retrieved from <u>https://news.detik.com/berita-jawa-tengah/d-3837562/pasangan-lansia-di-</u> magelang-ditemukan-meninggal-mengenaskan
- Phillips, D. R. (2002). Ageing in the Asia-Pacific region: Issues, policies and future trends (Vol. 2): Routledge.
- Phillips, D. R., & Chan, A. C. (2002). *Ageing and long-term care: national policies in the Asia-Pacific*: Institute of Southeast Asian Studies.
- Phillips, J. E., Ajrouch, K. J., & Hillcoat-Nallétamby, S. (2010). Key concepts in social gerontology: Sage.
- Priebe, J., & Howell, F. (2014). Old-age poverty in Indonesia: Empirical evidence and policy options. Retrieved from
- Qibthiyyah, R., & Utomo, A. J. (2016). Family matters: Demographic change and social spending in Indonesia. *Bulletin of Indonesian Economic Studies*, *52*(2), 133-159.
- Quadagno, J. (2008). The field of social gerontology. *Aging & the life course: An introduction to social gerontology*, 2-23.
- Quinn, J. F. (1993). *Poverty and income security among older persons*. Retrieved from
- Quinn, M. J., & Tomita, S. K. (1997). *Elder abuse and neglect: Causes, diagnosis, and interventional strategies* (Vol. 8): Springer Publishing Company.
- Rajan, S. I., & Kumar, S. (2003). Living arrangements among Indian elderly: New evidence from national family health survey. *Economic and Political Weekly*, 75-80.
- Reinhold, K., Tint, P., Tuulik, V., & Saarik, S. (2008). Innovations at workplace: improvement of ergonomics. *Engineering economics, 60*(5).
- Rieker, P. P., & Bird, C. E. (2005). Rethinking gender differences in health: why we need to integrate social and biological perspectives. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 60*(Special_Issue_2), S40-S47.

Rosser, A., & Edwin, D. (2010). The politics of corporate social responsibility in Indonesia. *The Pacific Review, 23*(1), 1-22.

Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The gerontologist,* 37(4), 433-440.

Rudkin, L. (1993). Gender differences in economic well-being among the elderly of Java. *Demography*, *30*(2), 209-226.

Russell, C. (1999). Interviewing vulnerable old people: Ethical and methodological implications of imagining our subjects. *Journal of aging studies, 13*(4), 403-417.

Samanta, T. (2017). Cross-cultural and cross-disciplinary perspectives in social Gerontology: Springer.

Sandelowski, M. (1991). Telling stories: Narrative approaches in qualitative research. *Image: the journal of nursing scholarship, 23*(3), 161-166.

Schmitt, V., & Chadwick, R. (2014). Social protection assessment-based national dialogue exercises: C ambodia, I ndonesia, T hailand, V iet N am. *International Social Security Review, 67*(1), 95-119.

Schröder-Butterfill, E. (2004a). Inter-generational family support provided by older people in Indonesia. *Ageing and Society, 24*(4), 497.

Schröder-Butterfill, E. (2004b). Inter-generational family support provided by older people in Indonesia. *Ageing & Society, 24*(4), 497-530.

Schröder-Butterfill, E. (2005). *The impact of kinship networks on old-age vulnerability in Indonesia.* Paper presented at the Annales de démographie historique.

Schröder-Butterfill, E., & Fithry, T. S. (2014). Care dependence in old age: preferences, practices and implications in two Indonesian communities. *Ageing & Society, 34*(3), 361-387.

Schröder-Butterfill, E., & Marianti, R. (2006). A framework for understanding old-age vulnerabilities. *Ageing & Society, 26*(1), 9-35.

Schröder-Butterfill, E., & Kreager, P. (2005). Actual and de facto childlessness in old age: evidence and implications from East Java, Indonesia. *Population and Development Review, 31*(1), 19-55.

Schultz, T. W. (1975). The value of the ability to deal with disequilibria. *Journal of economic literature, 13*(3), 827-846.

Sen, A. (2001). *Development as freedom*: Oxford Paperbacks.

Shanas, E. (1973). Family-kin networks and aging in cross-cultural perspective. *Journal of Marriage and the Family*, 505-511.

Siedlecki, K. L., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The relationship between social support and subjective well-being across age. *Social indicators research*, *117*(2), 561-576.

Sigit, H. (1988). A socio-economic profile of elderly in Indonesia. *Jakarta: Biro Pusat Statistik*.

SMERU, R. I. (2013). Poverty map. Retrieved from http://www.smeru.or.id/en/content/poverty-map

Spector, W. D., Katz, S., Murphy, J. B., & Fulton, J. P. (1987). The hierarchical relationship between activities of daily living and instrumental activities of daily living. *Journal of chronic diseases*, *40*(6), 481-489.

Steptoe, A., Shankar, A., Demakakos, P., & Wardle, J. (2013). Social isolation, loneliness, and all-cause mortality in older men and women. *Proceedings of the National Academy of Sciences, 110*(15), 5797-5801.

Strauss, A. L. (1978). *Negotiations: Varieties, contexts, processes, and social order*. Jossey-Bass Inc Pub.

Strydom, H. (2008). The future of community-based services for older persons in South Africa. *Practice*, *20*(2), 103-111.

Stuck, A. E., Walthert, J. M., Nikolaus, T., Büla, C. J., Hohmann, C., & Beck, J. C. (1999). Risk factors for functional status decline in community-living elderly

people: a systematic literature review. *Social Science & Medicine, 48*(4), 445-469.

Subiyono. (1999). Formal and Informal Older Person Support in Urban and Rural Villages in Indonesia: A Case Study in Central Java and Bali Province. (Dissertation). The University of Tokyo,

- Sullivan, N. (1994). *Masters and managers: A study of gender relations in urban Java*: Allen & Unwin.
- Sumarto, S., & Suryahadi, A. (2001). Principles and approaches to targeting with reference to the Indonesian social safety net. *ASEAN-Australia Social Safety Net Project in Jakarta, Indonesia, May*, 22-23.
- Sung, K.-t. (1998). Filial piety: The traditional ideal of parent care in East Asia. Aging and Spirituality, 10(1), 6-8.
- Sunusi, M. (2014). Inter-Generational Family And Community Support: Implication To Social Participation And Contribution Of Older Person. Paper presented at the The 12th Asean & Japan High Level Officials Meeting On Caring Societies, Japan.
- Suryadinata, L., Arifin, E. N., & Ananta, A. (2003). *Indonesia's population: Ethnicity and religion in a changing political landscape*: Institute of Southeast Asian Studies.
- Suryahadi, A., & Al Izzati, R. (2018). Cards for the Poor and Funds for Villages: Jokowi's Initiatives to Reduce Poverty and Inequality. *Journal of Southeast Asian Economies*, *35*(2), 200-222.
- Suryahadi, A., Yumna, A., Raya, U. R., & Marbun, D. (2010). *Review of Government's Poverty Reduction Strategies, Policies and Programs in Indonesia*: SMERU Research Institute Jakarta.
- Sutarto, A. (2006). Becoming a true Javanese: A Javanese view of attempts at Javanisation. *Indonesia and the Malay World, 34*(98), 39-53.
- Sweeting, H. (1994). Reversals of fortune? Sex differences in health in childhood and adolescence. *Social Science & Medicine, 40(1),* 77-90.
- Syukri, M., Bachtiar, P. P., Kurniawan, A., Sedyadi, G. S. M., Kartawijaya, R. A. D., & Alifia, U. (2018). Studi implementasi Undang-Undang No. 6 tahun 2014 tentang Desa: Laporan baseline [A study of the implementation of the Law No. 6/2014 on Village: A baseline report]. *Laporan Penelitian SMERU. Jakarta: The SMERU Research Institute*.
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of mixed methods research, 1*(1), 77-100.
- Ten Bruggencate, T., Luijkx, K. G., & Sturm, J. (2018). Social needs of older people: a systematic literature review. *Ageing and Society*, *38*(9), 1745-1770.
- Thristiawati, S. (2013). Socio-cultural dimension of gendered wellbeing of older persons in Lampung, Indonesia. (Dissertation Dissertation). The Australian National University, Canberra.
- Timonen, V. (2008). *Ageing societies: a comparative introduction*: McGraw-Hill Education (UK).
- TNP2K. (2018). The Future of The Social Protection System in Indonesia: Social Protection for All. In: TNP2K Jakarta.
- Tohme, R. A., Yount, K. M., Yassine, S., Shideed, O., & Sibai, A. M. (2011). Socioeconomic resources and living arrangements of older adults in Lebanon: who chooses to live alone? *Ageing and Society, 31*(1), 1.
- Townsend, P. (1979). Poverty in the United Kingdom: a survey of household resources and standards of living: Univ of California Press.
- Uhlenberg, P. (2009). *International handbook of population aging* (Vol. 1): Springer Science & Business Media.
- Ulil Absor, M., & Dwisetyani Utomo, I. (2017). School-to-work transition of young people in Greater Jakarta: the determinants of success. *Asian Population Studies, 13*(3), 306-326.

Utomo, A., Mcdonald, P., Utomo, I., Cahyadi, N., & Sparrow, R. (2019). Social engagement and the elderly in rural Indonesia. *Social Science & Medicine, 229*, 22-31.

Utomo, I. D., McDonald, P., Hull, T., Rosyidah, I., Hattimah, T., Idrus, N. I., . . . Makruf, J. (2008). *Gender depiction in Indonesian school text books: progress or deterioration.* Paper presented at the 26th IUSSP International Population Conference, Marrakech.

Van der Geest, S. (2002). Respect and reciprocity: Care of elderly people in rural Ghana. *Journal of cross-cultural gerontology, 17*(1), 3-31.

Van Eeuwijk, P. (2006). Old-age vulnerability, ill-health and care support in urban areas of Indonesia. *Ageing & Society, 26*(1), 61-80.

Van Minh, H., Ng, N., Byass, P., & Wall, S. (2012). Patterns of subjective quality of life among older adults in rural Vietnam and Indonesia. *Geriatrics & gerontology international*, *12*(3), 397-404.

Vartanian, T. P., & McNamara, J. M. (2002). Older women in poverty: The impact of midlife factors. *Journal of Marriage and Family, 64*(2), 532-548.

Victor, C. (2010). The demography of ageing. *The SAGE handbook of social gerontology*, 61-74.

Vos, R., E. Ganuza, Lofgren, H., Sánchez, M., & Díaz-Bonilla, C. (2008). *Public policies for human development*: United Nations Development Program (UNDP).

Warren, C. A. (2002). Qualitative interviewing. *Handbook of interview research: Context and method,* 839101.

Warwick-Booth, L. (2018). Social inequality: SAGE Publications Limited.

- WHO. (2013). Handbook on health inequality monitoring: with a special focus on low-and middle-income countries: World Health Organization.
- WHO. (2018). Integrated care for older people: realigning primary health care to respond to population ageing. Retrieved from
- Widjaja, M., & Simanjuntak, R. A. (2010). Social protection in Indonesia: How far have we reached? *Social Protection in East Asia-Current State and Challenges*, 157.
- Wiener, J. M., Hanley, R. J., Clark, R., & Van Nostrand, J. F. (1990). Measuring the activities of daily living: Comparisons across national surveys. *Journal of Gerontology*, 45(6), S229-S237.

Wirakartakusumah, D., Nurdin, H., & Wongkaren, T. S. (1997). The role of Indonesian women in an ageing society. *Untapped Resources: Women in Ageing Societies Across Asia. Times Academic Press, Singapore*, 95-116.

- Wisner, B. (2013). Assessment of capability and vulnerability. In *Mapping vulnerability* (pp. 202-212): Routledge.
- Wisner, B., & Luce, H. R. (1993). Disaster vulnerability: scale, power and daily life. *GeoJournal, 30*(2), 127-140.
- Witoelar, F. (2012). Household dynamics and living arrangements of the elderly in Indonesia: Evidence from a longitudinal survey. In *Aging in Asia: Findings from new and emerging data initiatives*: National Academies Press (US).
- Wunderink, S., & Niehoff, M. (1997). Division of household labour: Facts and judgements. *De Economist, 145*(3), 399-419.
- Yount, K. M. (2005). The patriarchal bargain and intergenerational coresidence in Egypt. *The Sociological Quarterly, 46*(1), 137-164.
- Yount, K. M., & Khadr, Z. (2008). Gender, social change, and living arrangements among older Egyptians during the 1990s. *Population Research and Policy Review*, *27*(2), 201-225.
- Zaumseil, M., Schwarz, S., Von Vacano, M., Sullivan, G. B., & Prawitasari-Hadiyono, J. E. (2013). *Cultural psychology of coping with disasters: The case of an earthquake in Java, Indonesia*: Springer.

Appendix

1. Interview Guide for Government Institutions

Name of institution	
Place and Date of interview	

I. Time and type of interview

Face to face interview for 45-60 minutes

II. Introduction

Greetings, self-introduction, acknowledgement, introducing the objective of the interview

III. Interviewees

The staff who are in charge of services for older people

- a) Name
- b) Designation
- c) Age
- d) Sex
- e) Education attainment :

IV. Key questions

1. The structure of institution

- a) Could you explain the structure or division in your institutions?
- b) Is there any division or department organizing long term care services for older people?
- c) If yes, how many people are working in the division and what are their roles?

2. Older people's situation and policy

- a) What are the main problems particularly in elderly care faced by older people? Probing: health, economic well-being, social isolation, housing, everyday care.
- b) How could these problems be solved in your opinion?
- c) What are older people's needs?
- d) Who has responsibility in fulfilling the needs of elderly and how?

3. Programs

- a) What services are offered to older people?
 - Probing: social assistance, empowerment, health, social protection
 - b) How many beneficiaries are covered by each program?
 - c) Who is eligible and How to select them?
 - d) In which district/areas are program implemented?
 - e) What problems are addressed by this program?
 - f) When the service begin and end?
 - g) How much budget to run this program?

- h) With whom does the organization cooperate in implementing the program? How?
- i) What is the impact of the programs?
- j) Which program has been successful, and which have not? Why?
- k) What are the challenges in implementing the program?
- I) What is your suggestion to improve services?
- V. Closing

2. Interview Guide for Village Apparatus and local leaders

Name of village	
Place and Date of interview	

I. Time and type of interview

Face to face interview for 45-60 minutes

II. Introduction

Greetings, self-introduction, acknowledgement, introducing the objective of the interview

III. Interviewees

The village apparatus, midwife and social workers

- a) Name
- b) Designation
- c) Age
- d) Sex
- e) Education attainment :

IV. Key questions

1. Village Demography

- a) How many households are in this village? Among those households, how many households can be categorized as poor household?
- b) How many older people are in this village?
- c) What kind of institutions/organization operated in the village?
- d) What kind of institutions that are older people participated?
- e) What is the main occupation of people in the village?
- f) Does the migration of young people high? How many male and male?
- g) If young people migrated, with whom older people live and who are responsible to take care left behind older people?
- h) What are older people's needs? how older people and their families meet their needs?
- i) Based on your observation, how many frail and disabled older people in this village?

2. Cultural aspect

- a. Based on local culture, who is responsible for taking care of older people?
- b. Culturally, what is appropriate and inappropriate activities for older people? Probing: working, caring grandchild, social and religious activity, leader.
- c. How inheritance is divided?
- d. Is there any changing in of caring older people across generation?

3. Older people situation

a. Based on your observation, what are the main problem faced by older people? Probing: health problem, disability, poverty, availability and quality of care

- b. If older people have problem, what they do? Who they ask for help?
- c. What is the role of older people stakeholder to help older people? Probing: government, NGO, community, neighbour, children, relatives.

4. Programs

- a) What are existing programs to support older people?
- b) What is funding sources for each program?
- c) What is the impact of the programs for older people?
- d) What is the main needs of older people?
- e) What is your suggestion to improve the quality of life of older people?

V. Closing

3. Interview Guide for The Elderly

Name of Village	
Place and Date of interview	

I. Time and type of interview

Face to face interview for 60-90 minutes

II. Introduction

Greetings, self-introduction, acknowledgement, introducing the objective of the interview

III. Interviewing Older Persons

A. Demographic profiles of Interviewees

- f) Name
- g) Age
- h) Sex
- i) Marital status
- j) Education attainment :

B. Key questions

- a) With whom do you live with?
- b) What is your occupation before 60 and after 60 years?
- c) What is your daily activity? Why? Probing: physical activity, social and religious activity, economic activity, leisure time
- d) How the work division in the house? Probing: preparing foods, shopping, cleaning
- e) How much time do you spent for each activity?
- f) What social and religious activity do you usually attend?
- g) Is there any change on your daily routine before 60 and after 60 years?
- h) Do you have closed friends? How often do you speak to them? What kind of activity do you usually do with your friends?
- i) Based on your condition, do you need someone to assist you with daily living activities?
- j) Who usually provide care/help you?
- k) Based on your experience, Is there any change in providing care to older people across generation?
- I) Do you have specific issue or problems you face as an older person?
- m) What did you do to solve the problem?
- n) What kind of needs do you have which is not fulfilled yet?
- o) If you have problem, who usually help you? What kind of activity do you need help? Probing: children, spouse, neighbour and other family members.

- p) Is there any change in your relationship with your family, friends and community after being an older person?
- q) What do you like to be an older person and why?
- r) What do you don't like as an older person and why?
- s) What are the things or events make you happy?
- t) What are the things or events make you sad?
- u) What are the things or events make you worry and avoid as an older person?
- v) What are the thins that you pursue in after being old?
- w) What is your role in household, social and religious activity?
- Did you receive any formal support during the past year?
 Probing: health insurance, home care program, day care services, *PKH Lansia, Aslut, BKL, Poslansia, Prolanis.*
- y) What is your suggestion to improve your life situation?

IV. Closing