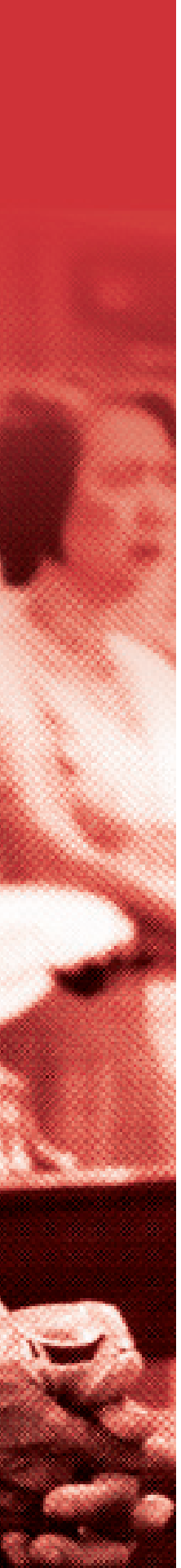

Chapter 6

Mortality

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One of modern society's most important public health achievements is the rise in life expectancy. Since the second half of the twentieth century, socioeconomic development, medical advancements, and improvements in public health have paved the way for major gains in life expectancy in many developed and developing nations (Gjonça and Marmot, 2005). Improved survival came with an unprecedented trade-off, characterised by a substitution in causes of death from infectious or parasitic diseases to noncommunicable or degenerative diseases such as heart conditions and cancer (Omran, 1971). An important feature of this mortality and epidemiological transition is that deaths associated with degenerative causes are more likely to strike later in the life course, leading to a postponement of death to older ages (Land and Yang, 2006). These processes provided an impetus for the burgeoning number of people reaching older adulthood and underpin the ageing of the world's population (Victor, 2010).

Much like the West, the Asian region has witnessed notable changes in old-age survival over the past several decades (Gu et al., 2017). In the Philippines, Filipinos are living longer lives than at any point in history. Estimates for the 2020 census-based population projections indicate that, on average, those who live to celebrate their 60th birthday can expect to survive 16.72 more years for males and 20.69 more years for females.[1] Improved longevity, however, is accompanied by an important caveat: Increasing disability amongst the older population means that a significant proportion of the final years of life are likely to be spent in an unhealthy state (Cruz, Cruz, and Saito, 2022). Longer yet unhealthier lives pose a challenge to the country's healthcare systems and social services, as these translate to increased demand for more intensive caregiving and financial support.

In the context of the Philippines, information on old-age mortality is mainly derived from reports of death collected by the Civil Registration and Vital Statistics (CRVS) system of the Philippine Statistics Authority. Data on mortality and morbidity are also collected by the DOH through its Field Health Services Information System, which consolidates information obtained from local registry offices as well as local health facilities. Over the years, the quality of the CRVS data in the country has improved, with the level of death registration reported at 92.3% as of 2020 (Grande, 2021). Data on the total number of older people needed to estimate the risk of death in old age are from the Census of Population and Housing.

The improvements in CRVS data quality notwithstanding, more data is still needed on older people in general and adult mortality in particular. More information and research is needed to support a more nuanced understanding of the unique conditions that older people face, particularly about factors affecting their mortality and morbidity. There are only three nationally representative surveys on older Filipinos: the 1996 Philippine Elderly Study (PES; UPPI and DRDF, 2022), the 2007 Philippine Study of Ageing (see Cruz et al., 2016), and the Longitudinal Study of Ageing and Health in the Philippines (LSAHP; see Cruz, Cruz, and Saito, 2019). The LSAHP, which is the first nationally representative panel study on older people with two waves of data collected, is the only nationally representative survey on older people with information on mortality in the country. An earlier exploratory mortality panel study on older Filipinos was conducted in the 2000 Philippine Follow-up Survey on the older-person respondents of the 1996 Philippine Elderly Survey but for selected regions. The study was the first attempt to gather panel data on older Filipinos and was conducted primarily to explore the feasibility of employing a panel study design to understand the conditions of older people. The panel data covered two out of five original areas of the 1996 PES, including the National Capital Region and Leyte, which together accounted for 46% of the total respondents in the 1996 PES (Natividad and Cruz, 2002).

[1] These figures were based on the output of the 2020 census-based population projections of the Inter-agency Working Group on Population Projections.

This chapter focuses on mortality data from LSAHP Wave 2. Information collected from interviews with informants of Wave 1 respondents who have died provides comprehensive insights into the context of older adult mortality in the Philippines. The deceased respondents' closest kin or friends (99%), who were most knowledgeable about the circumstances surrounding the deaths of the older persons, served as informants for the LSAHP Mortality Questionnaire. These were the older persons' children, spouses, other relatives, and grandchildren. In addition to the data collected in the Mortality Questionnaire, LSAHP Wave 2 also included questions from the 2022 Verbal Autopsy (VA) questionnaire developed by WHO. Results and detailed analyses of the VA interviews will not be included in this report and will be reported elsewhere.

This chapter presents an overall picture of mortality amongst older Filipinos through an examination of their background characteristics (e.g. age, marital status, and geographical location), living arrangements and caregiving situation, healthcare utilisation, and prevalence of death registration. About one in five respondents of the nationally representative Wave 1 sample (1,579 individuals) were reported deceased as of the Wave 2 data collection. Of this number, 1,514 had an informant that was available for the interview, which constitutes the analytic sample for this chapter of the report.

1. Background Characteristics

As shown in Table 6.1, more than half of those who died are females (52%); the corresponding figure for males is 48%. The mean age at death is about 77 years old, with females registering a slightly higher average age at death of 78 years compared to 75 for males. More older persons were residing in rural (60%) than in urban areas (40%) when they died.

Table 6.1. Profile of Deceased Respondents

Background Characteristics	%
Sex	
Male	48.1
Female	51.9
Mean age at death	
Male	75.37
Female	77.92
Both sexes	76.70
Place of residence	
Urban	40.1
Rural	59.9
Marital status at the time of death	
Single	5.2
Married	35.0

Background Characteristics	%
Living in	4.2
Separated, divorced, or annulled	1.3
Widowed	54.4
Major island group	
NCR	2.1
Balance Luzon	54.8
Visayas	28.9
Mindanao	14.2
N	*1514*

Source: Calculated by the DRDF using original LSAHP W2 data.

About half (54%) of those who were reported deceased were widowed at the time of their death, whilst 35% were with a spouse or partner and 4% were cohabiting. Only a small proportion (5%) were never married, and 1% were separated or divorced (Table 6.1).

2. Residential History, Living Arrangements, and Caregiving Situation

Most deaths that strike late in the life course typically follow a period of chronic, debilitating illness, which requires long-term and intensive care (Warraich, 2017). The company of family members figures prominently not only in care arrangements at the onset of disease and disability but also in the remaining period before death (Carr and Luth, 2019). For many older adults, spending their final days in the presence of their loved ones is a more favourable scenario than dying in an intensive care facility (Carr, 2012a). This becomes more meaningful when situated within the broader context of cultural expectations regarding caring for older people; this is particularly relevant in Filipino society, in which such a task typically falls on family members. Whilst death is inevitable, the nature and circumstances of the dying process have important implications for the ways in which psychological responses and coping strategies are shaped amongst bereaved caregivers, who are often wives and daughters (Agree and Glaser, 2009; Carr, 2012b; Leopold and Lechner, 2015). For example, a forewarning period that accompanies a chronic illness may allow family members to prepare effectively for their loved one's end of life and ensure a 'good death' for all (Carr, Wortman, and Wolff, 2006).

The end-of-life situation of older adults and their families has attracted much scholarly attention in the West (Ornstein et al., 2017). However, the experiences of older Filipinos in their final period of life remains understudied in the literature. This section sheds light on the end-of-life situation of older Filipinos by drawing on key information surrounding the deaths of LSAHP respondents who died before the conduct of Wave 2, highlighting their residential history, living arrangements, household composition, and caregivers.

Table 6.2 shows that older Filipinos exhibit a strong aversion to residential change in the final stages of their lives. Almost all deceased LSAHP respondents (94%) died at the same address where they were interviewed during Wave 1. This was more pronounced amongst males than females and more common in the younger cohort relative to the older age group. Only 6% of the respondents changed their home address.

Older Filipinos' preference for residential stability is further highlighted in the Wave 1 findings, which reveal an average stay of 24 years in their current residence amongst those not living in their birthplace (see Cruz and Cruz, 2019). Furthermore, they were interviewed at the baseline, only 2% of these older individuals expressed an intention to migrate within the next 2 years.

Table 6.2. Residential History and Living Arrangements at the Time of Death by Sex and Age

Residential History and Living Arrangement	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
Residential history								
Same address as Wave 1	97.2	91.0	**	98.8	94.1	90.7	*	94.0
Different address from Wave 1	2.8	9.0		1.3	5.9	9.3		6.0
N	*656*	*858*		*195*	*506*	*813*		*1,514*
Persons living with older person at the time of death								
Spouse	56.8	15.6	***	58.7	32.5	23.4	***	35.4
Son or stepson	37.2	33.6	*ns*	42.4	28.1	39.1	*ns*	35.3
Daughter or stepdaughter	46.7	44.2	*ns*	43.1	48.1	43.8	*ns*	45.4
Son-in-law	7.9	17.3	**	5.2	16.6	13.3	*ns*	12.8
Daughter-in-law	9.9	18.4	*	12.0	10.9	19.8	*ns*	14.3
Grandson	26.1	35.1	*	16.6	29.7	41.3	**	30.7
Granddaughter	21.6	38.7	**	25.7	28.6	35.8	*ns*	30.5
Other relative	8.6	16.3	*	15.5	11.5	12.0	*ns*	12.6
Nonrelative	0.4	1.2	*ns*	0.4	0.3	1.7	**	0.8
Domestic helper	0.4	0.2	*ns*	0.1	0.4	0.3	*ns*	0.3
Others	2.9	6.1	*ns*	3.7	6.0	3.5	*ns*	4.6
N	*656*	*858*		*195*	*506*	*813*		*1,514*
Mean number of persons living with older person at the time of death	3.63	4.23	*	4.23	3.67	4.04	*ns*	3.93
N	*626*	*820*		*189*	*482*	*775*		*1,446*

*p < .05, **p < .01, *** p < .001, ns = not significant.

Source: Calculated by the DRDF using original LSAHP W2 data.

The centrality of the family in the older person's final years is reflected in the individuals living with the older person at the time of their death. The results show clear gender and age differences: significantly more males than females (57% vs 16%) resided with their spouses at the time of death. In contrast, significantly more females co-resided with extended family members, particularly their grandchildren. Most females reported living with their granddaughters (39%) and grandsons (35%) and, to a lesser extent, their daughters-in-law (18%) and sons-in-law (17%). Additionally, females were more likely than males to report living with other relatives (16% vs 9%).

As expected, the proportion of older persons living with a spouse at the time of death significantly declines with age, whilst the proportion living with their grandchildren and nonrelatives increases with advancing age. There is no significant difference in the proportion of those living with sons and daughters. Generally, only a minority had nonrelatives and/or domestic helpers living in the same household at the time of their death. Amongst older Filipinos who were not living alone when they died, the mean number of people living with them was about four (Table 6.2).

The period leading to the end of life may be characterised by functional disability and chronic illnesses, which create the need for more challenging care work from their caregivers. Results reported in Table 6.3 show that caregivers take on a critical role in the lives of older adults. More than two in every three (68%) older Filipinos were reported to have had a caregiver before their death. This is significantly more common amongst females (74%) than males (62%). Amongst those aged 80 and over when they died, about 74% were reported to have had a caregiver in their remaining years of life.

Table 6.3. Caregivers of Older Persons Prior to Death by Sex and Age

Caregiving	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
% who had a caregiver before death	62.4	73.7	**	64.5	65.2	74.4	*ns*	68.3
N	*656*	*858*		*195*	*506*	*813*		*1,514*
Relationship of caregiver to older person								
Spouse	53.3	4.9		49.2	26.9	12.3		26.2
Son or stepson	8.7	12.7		8.4	11.6	11.8		11.0
Daughter or stepdaughter	22.7	52.4		19.7	41.4	48.5		39.3
Son-in-law	0.0	0.1		0.3	0.0	0.0		0.1
Daughter-in-law	2.8	9.7		1.2	7.6	8.9		6.7
Grandson	0.6	0.6	***	0.0	0.9	0.7	***	0.6
Granddaughter	2.0	6.8		1.8	1.2	9.9		4.7
Other relative	9.2	9.5		19.3	6.4	6.6		9.4
Nonrelative	0.4	1.1		0.2	1.0	1.0		0.8
Domestic helper	0.2	2.1		0.0	2.9	0.4		1.3
Others	0.0	0.0		0.0	0.1	0.0		0.0
N	*458*	*644*		*122*	*344*	*636*		*1,102*

*p < .05, **p < .01, *** p < .001, ns = not significant.

Source: Calculated by the DRDF using original LSAHP W2 data.

End-of-life caregiving is generally family centred, informal, and gendered. Most of the caregiving at the time of an older person's death is reliant on daughters (39%), spouses (26%), sons (11%), and other relatives (9%). A significant gender difference is noted, with most males citing their spouses as their caregivers (53%) compared to only 5% of females. In contrast, daughters are more prominently the caregivers of their mothers (52%) compared to their fathers (23%) at the time of the older person's death (Table 6.3).

The foregoing findings validate the Wave 1 results that show that caregiving for older persons is primarily a family responsibility, often informal, and predominantly performed by women. Findings demonstrate a higher prevalence of spousal caregiving amongst males, with the majority having their wives as their primary caregivers. Spousal caregiving is more common in the earlier stages of ageing and declines with advanced age (Laguna, 2019).

3. Healthcare Utilisation Before Death

LSAHP Wave 2 also sought to obtain information regarding the healthcare utilisation of the deceased respondents in the 12 months preceding their deaths. The mortality questionnaire explores information on two types of healthcare services: inpatient and outpatient care.

3.1. Inpatient Care Utilisation

Inpatient health services refer to whether the older person stayed at least overnight in any health facility in the 12 months before their death. Results indicate that 39% were hospitalised within this period. The percentage is greater for males than females, with almost half (49%) of men and a third (30%) of women availing of such services in the last 12 months of their lives (Table 6.4).

Table 6.4. Inpatient Utilisation Prior to Death by Sex and Age

Inpatient Utilisation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
% who stayed overnight in a hospital or other medical facility in the past year because of an illness or accident in the 12 months before death	48.8	30.2	**	51.3	38.8	33.1	*ns*	39.2
N	*484*	*641*		*125*	*343*	*657*		*1,125*
Mean number of times stayed at least overnight in a hospital prior to death	2.21	2.50	*ns*	2.22	2.10	2.67	*ns*	2.32
N	*198*	*217*		*61*	*139*	*215*		*415*

Inpatient Utilisation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
Type of facility used the last time hospitalised								
Municipal hospital	13.0	4.0		1.8	18.1	5.4		9.4
District hospital	22.9	5.7		29.5	8.7	13.3		16.0
Provincial or city hospital	24.4	30.9		34.9	29.2	17.6		27.0
Regional hospital	4.8	4.5		1.4	8.1	3.4		4.7
Public or national hospitals (e.g. PGH)	2.4	1.0	*	0.2	2.9	2.0	*	1.8
Public specialty hospitals	0.6	0.1		1.3	0.0	0.1		0.4
Private clinic	3.4	1.0		3.4	3.0	0.9		2.4
Private hospital	28.8	51.2		25.1	30.1	57.3		37.7
Others	0.0	1.6		2.3	0.0	0.0		0.6
N	*197*	*217*		*61*	*139*	*214*		*414*
Who paid the most for the hospitalisation								
Respondent	9.4	5.8		6.4	9.0	8.1		8.0
Spouse	14.7	2.9		14.8	8.5	8.0		10.1
Children	61.6	76.1		62.7	78.5	57.8		67.3
Grandchildren	0.1	7.1	**	0.0	0.8	7.7	*ns*	2.8
Other relatives	12.5	6.5		11.0	3.0	17.9		10.1
Local government fund	1.5	1.2		3.9	0.2	0.6		1.3
Others (pension, etc.)	0.2	0.5		1.3	0.0	0.0		0.3
N	*196*	*216*		*58*	*128*	*197*		*383*
% who availed of PhilHealth benefits	93.0	82.6	*	85.4	91.1	89.1	*ns*	88.9
N	*198*	*217*		*61*	*139*	*215*		*415*
% who availed of private medical or health insurance aside from PhilHealth	14.7	10.1	*ns*	8.9	4.4	26.7	*	13.0
N	*174*	*190*		*51*	*121*	*192*		*364*
% who availed of discounts for senior citizens for medical expenses	95.2	82.9	**	89.1	93.0	88.0		90.3
N	*198*	*217*		*61*	*139*	*215*		*415*

*p < .05, **p < .01, ns = not significant.

PGH = Philippine General Hospital.

Source: Calculated by the DRDF using original LSAHP W2 data.

Amongst those confined in a health facility before their death, confinement occurred about twice within a year, on average, with no significant difference by sex and age. In terms of the healthcare facilities where they received inpatient care services during their last confinement, the majority (59%) reported utilising public health facilities such as barangay health stations, rural health units, and district or community hospitals, where costs are considerably lower than private establishments. The corresponding percentages for confinement in private facilities is lower: 38% for private hospitals, 2% for private clinics, and 1% for other facilities (Table 6.4). Significantly more women than men (52% vs 32%) utilised private hospitals in their last hospitalisation prior to their death. The proportion utilising private health facilities increases with age (from 28% amongst those less than 70 years old to 58% amongst those over 80 years old).

The majority (67%) of older persons' children covered the cost of inpatient care expenses not covered by PhilHealth during the deceased person's last hospitalisation, with this support higher amongst older women than men (76% vs 62%). Grandchildren were the second-highest providers of financial support for women's hospitalisation costs, whilst spouses were the second-highest source for men. The spouse and other relatives are secondary sources of financial support for the hospitalisation of older Filipinos. Only 8% of older Filipinos covered the hospitalisation costs themselves, with the percentage higher for males than females (9% vs 6%). About 9 out of 10 (89%) availed of PhilHealth benefits, either as members or dependents, whilst 13% used other medical or health insurance to pay for their last hospitalisation cost. Almost all senior citizens (90%) utilised their privileges for medical expenses during the mentioned hospitalisation (Table 6.4).

3.2. Outpatient Care Utilisation

Outpatient care utilisation in the 12 months preceding the older person's death was about 42%, with no significant age and gender disparity. In contrast to inpatient care, which public health facilities predominantly provided, more older persons availed of outpatient care in private hospitals (33%), clinics (22%), or other private healthcare providers such as medical missions (3%) for their last outpatient service. Amongst government health services, provincial or city hospitals were the most frequently visited by older people for their last medical care for an illness or accident without an overnight stay, accounting for 16% of visits.

As with inpatient care, physicians (98%) emerged as the health practitioner most often consulted for health problems amongst those who availed of outpatient care in the 12 months leading to their death (Table 6.5).

Table 6.5. Outpatient Utilisation Prior to Death by Sex and Age

Outpatient Utilisation	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
% who received medical care for an illness or accident from any medical facility or practitioner without staying overnight in the 12 months prior to death	44.8	38.8	ns	54.9	37.8	37.5	*ns*	41.7
N	*656*	*858*		*195*	*506*	*813*		*1,514*
Type of facility visited most as an outpatient								
Municipal hospital	14.9	7.1		0.8	21.6	8.7		11.2
District hospital	8.2	5.3		8.8	4.9	7.3		6.8
Provincial or city hospital	15.8	17.1		17.7	22.6	8.1		16.4
Regional hospital	0.4	11.3		16.7	0.9	0.8		5.6
Public or national hospitals	0.9	0.9	*ns*	0.7	1.0	1.0	**	0.9
Public speciality hospitals	0.0	3.9		0.0	4.9	0.0		1.8
Private clinic	25.7	16.9		23.0	17.8	24.4		21.5
Private hospital	32.6	33.4		32.0	24.0	44.5		33.0
Others (medical missions, etc.)	1.4	4.2		0.4	2.4	5.3		2.7
N	*244*	*314*		*88*	*197*	*273*		*558*
Health practitioner seen most often for health problems								
Traditional practitioner	0.0	0.0		0.0	0.0	0.0		0.0
Doctor	99.7	96.4		98.4	98.8	97.1		98.1
Nurse	0.1	2.7	***	1.6	0.2	2.4	*ns*	1.3
Midwife	0.1	0.8		0.0	1.0	0.2		0.4
Barangay health worker	0.0	0.1		0.0	0.0	0.1		0.0
Others	0.1	0.0		0.0	0.0	0.2		0.1
N	*245*	*316*		*89*	*198*	*274*		*561*

**p < .01, *** p < .001, ns = not significant.

Source: Calculated by the DRDF using original LSAHP W2 data.

4. Death Registration and Information from Death Certificates

Information on levels and patterns of mortality by age and sex allows public health institutions to assess the burden of disease in populations. In many high-income countries, the planning and monitoring of public health initiatives benefit substantially from complete and reliable information on deaths, including causes of death. Death reporting through the CRVS is considered the gold standard for collecting such information and is important for tracking progress towards the attainment of health-related United Nations Sustainable Development Goals.

The Philippine government recognises the importance of a well-functioning CRVS system that provides sufficiently representative information on deaths and causes of death for the development of national health and population policies. The country is a signatory to the Regional Action Framework of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), which primarily aims to strengthen the CRVS system and achieve universal registration of births and deaths in the Asia-Pacific region by 2024 (UNESCAP, 2017). Accordingly, the country's CRVS system adheres to the WHO-approved format for recording the sequence of conditions (antecedent, underlying, and other significant conditions) leading to the immediate cause of death.

In the LSAHP, informants were queried about the registration status of the death of the older-person respondent. For those deaths that were registered, we further inquired whether the informant possessed a copy of the death certificate. If a copy was available, permission was sought to capture a picture of the death certificate. From registered deaths with a copy of the death certificate, pertinent information such as marital status, place of death, and the causes of death as determined by a physician were extracted. For cases where no death certificate copy was available, data were obtained directly from the respondent. The following section is based on the mortality data obtained from the death certificates and the reports of informants in the case of those without death certificates.

There is a high level (94%) of death registration amongst the deceased LSAHP respondents. Of those registered, more than half (56%) have a copy of the death certificate, with the percentage higher amongst the males than females (65% vs 48%; Table 6.6).

Striking gender differences in mortality patterns emerged from the information reflected in their death certificates. More males than females were married (53% vs 19%) or in live-in arrangements (7% vs 1%) at the time of their death. Most of the older persons who died were widowed at their time of death (74% for females vs 33% for males). A minority were never married (5%) and were separated, previously had their marriage annulled, or divorced (1%) when they became deceased.

A low prevalence of facility-based deaths, comprising 26% of registered deaths, is shown in Table 6.6. Seven of ten deaths were home based: 60% occurred in the same residence where they were interviewed during Wave 1, and 13% were in a different residence. A negligible percentage (1%) of informants reported that the death took place neither at home nor in a health facility.

Low access to healthcare at the end of life is borne out in the results, with less than half (43%) of older Filipinos seeking the services of a health professional in the week prior to death. Of those who did, almost all (98%) consulted a physician for their health problems.

Table 6.6. Death Registration and Information from Death Certificates by Sex and Age

Death Registration and Information from Death Certificates	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
Death registration								
% whose deaths were registered	93.4	95.4	*ns*	95.9	94.4	93.5	*ns*	94.4
N	*656*	*858*		*195*	*506*	*813*		*1,514*
Informant has a copy of dead older person's death certificate	65.1	48.5	*	49.0	58.1	59.5	*ns*	56.4
N	*614*	*803*		*186*	*471*	*760*		*1,417*
Marital status								
Single	5.4	4.9		2.7	6.4	5.4		5.2
Married	52.6	18.7		58.3	32.1	23.2		35.0
Living in	7.3	1.3	***	6.8	5.0	1.5	***	4.2
Separated, divorced, or annulled	1.7	0.8		1.5	2.1	0.1		1.3
Widowed	32.9	74.3		30.8	54.5	69.9		54.4
N	*656*	*858*		*195*	*506*	*813*		*1,514*
Place of death								
At home (Wave 1 residence)	63.2	56.2		61.1	53.8	65.3		59.6
At home (Different from Wave 1 residence)	10.2	16.1		3.8	16.1	16.2		13.3
In a health facility (hospital clinic, etc.)	25.0	26.4	*ns*	32.8	28.5	17.8	*ns*	25.7
Others (e.g. dead on the way to the health facility)	1.6	1.3		2.2	1.6	0.7		1.4
N	*656*	*858*		*195*	*506*	*813*		*1,514*
% who consulted a health professional in the week prior to death	46.9	39.5	ns	53.3	42.7	37.8	*ns*	43.1
N	*484*	*641*		*125*	*343*	*657*		*1,125*
Health professional consulted in the week prior to death								
Traditional practitioner	0.7	0.0		1.4	0.0	0.0		0.4
Doctor	98.9	96.6		93.9	99.6	98.7		97.8
Nurse	0.3	0.3		0.0	0.4	0.4		0.3
Midwife	0.1	0.1	*ns*	0.0	0.1	0.2	*ns*	0.1
Barangay health worker (BHW)	0.0	3.1		4.7	0.0	0.6		1.4
Others	0.0	0.0		0.0	0.0	0.1		0.0
N	*223*	*251*		*75*	*159*	*240*		*474*

*p < .05, **p < .01, *** p < .001, ns = not significant.

Source: Calculated by the DRDF using original LSAHP W2 data.

In LSAHP, causes of death were coded using the 11th revision of the International Classification of Death (ICD-11) per WHO recommendation. Immediate causes of death are summarised in Table 6.7, shown by sex and age group. Respiratory system diseases, heart diseases, and cerebrovascular ailments are the leading causes, together accounting for 43% of all deaths. For males, endocrine-related diseases such as diabetes rank next (4%); for females, deaths were more frequently attributed to conditions associated with frailty or their advanced age (6%). Cancer, digestive system diseases, and genitourinary system diseases show varying prevalence across age groups, with cancer being more common amongst those under 80 (3% amongst those under 70, 5% amongst those aged 70–79). Notably, about one in five mentioned clinical outcomes such as 'cardiac arrest', 'shock', and 'multiple organ failure' rather than a specific underlying disease.

Table 6.7. Immediate Causes of Death by Sex and Age

Causes of Death	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
Cancer	3.1	3.5		3.1	5.1	1.4		3.3
Heart disease (heart attack, etc.)	17.6	12.8		14.9	16.9	13.4		15.2
Cerebrovascular ailments (stroke, cerebral thrombosis)	11.2	13.0		22.1	12.2	5.5		12.1
Old age (frailty caused by ageing)	0.8	6.2		0.0	0.2	9.6		3.6
Certain infectious or parasitic diseases	1.7	2.0		2.7	1.5	1.8		1.9
Diseases of the blood or blood-forming organs	0.5	0.1		1.0	0.0	0.2		0.3
Diseases of the immune system	0.0	0.0		0.0	0.0	0.0		0.0
Endocrine, nutritional, or metabolic diseases	4.2	3.8		4.6	3.1	4.6		4.0
Mental, behavioural, or neurodevelopmental disorders	0.0	0.1	*	0.0	0.0	0.1	***	0.1
Diseases of the respiratory system	17.0	13.5		11.4	17.8	14.9		15.2
Diseases of the digestive system	1.1	2.3		4.7	1.1	0.5		1.7
Diseases of the skin	0.0	0.0		0.0	0.1	0.0		0.0
Diseases of the musculoskeletal system or connective tissue	0.1	0.1		0.0	0.1	0.1		0.1
Diseases of the genitourinary system	2.2	1.9		3.7	1.4	1.7		2.1
Injury, poisoning, or certain other consequences of external causes	0.5	3.6		0.0	4.8	0.6		2.1
External causes of morbidity or mortality	0.9	1.8		1.5	2.1	0.3		1.3
COVID-19	0.6	0.6		0.9	0.2	0.9		0.6

Causes of Death	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	<70	70–79	80+	Sig	
Symptoms, signs, or clinical findings, not elsewhere classified								
Cardiac arrest	13.7	11.9		4.7	12.9	18.0		12.8
General symptoms (e.g. shock, multi-organ failure)	9.2	3.6	*	4.7	9.0	4.5	***	6.3
Others	0.7	0.4		0.5	0.7	0.5		0.6
Ill-defined causes	8.2	3.9		0.4	5.7	10.0		6.0
Not sure	6.4	14.9		19.0	5.2	11.5		10.8
N	*594*	*778*		*178*	*452*	*742*		*1372*

* $p < 0.05$, *** $p < 0.001$.

Source: Calculated by the DRDF using original LSAHP W2 data.

5. Summary, Conclusions, and Recommendations

Death is an inevitable experience. However, whilst death befalls everyone at the end of their life course, survey data from the LSAHP paints a picture of important heterogeneities in death and dying amongst older persons. Information culled from their kin and their death certification reveals two characteristics that were significant in the period leading to the end of life: family relationships and inpatient care utilisation. Differences between males and females in these characteristics suggest that gender might be a stratifying force through which end-of-life experiences are filtered.

In general, survey data show first that the family forms the centrepiece of older persons' remaining years of life. Most of the reported deaths did not occur at a health facility but in their respective homes, in the company of family members. There is a clear distinction between males and females in terms of which family members play a role in their end-of-life experiences, particularly regarding their living arrangements and caregiving. Whilst it is more common for males to co-reside with and benefit from the care of nuclear family members, namely, their spouse and any of their adult children, older females are more likely to co-reside in a multigenerational household consisting of their adult children and grandchildren during the period leading to their death, with their daughters assuming a central role in their end-of-life care.

Second, data highlight mortality gaps across marital status. In particular, widowed older persons account for the majority of the deceased. The bulk, however, are female; this distinction can be attributed to gender disparities in longevity in which wives tend to outlive their husbands, as well as differences in mean age at marriage. By contrast, a greater share of males was in a partnership (either formally married or cohabiting) by the end of their lives.

Finally, whilst the data reveal a similar level of inpatient and outpatient care utilisation towards the end of life, the differences lie in which type of healthcare facilities are used: public for inpatient care, and private for outpatient care. This signals factors such as cost, convenience, and perceived quality of service offered by each type of facility depending on older persons' needs. On the other hand, the results put a spotlight on older Filipinos' heavy reliance on informal sources of funding for private inpatient health services during the final period of life. This is particularly true for females, for whom confinement in a private health facility in the last 12 months before death is more common, the out-of-pocket costs of which are mostly covered by family members, such as their adult children and grandchildren. Furthermore, insights from death certificates highlight the higher prevalence of home-based deaths than facility-based deaths.

These findings reinforce the call to strengthen public healthcare infrastructure to ensure that older Filipinos have access to quality and affordable services, whether for long-term care for degenerative illnesses or for palliative care towards the end of life. Support programmes for family members are also important: giving them access to care training and financial assistance will allow family members to focus on their caregiving responsibilities. On the other hand, expanding social services for older persons is vital to reducing reliance on family care whilst ensuring a dignified end-of-life experience. Finally, improving death registration will ensure accurate mortality data in aid of better public health planning and policy development.

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