

Research Brief
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Deteriorating Health
but Still Working
Very Long Hours -
A Profile of
Singapore's Older Family
Caregivers

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Deteriorating Health but Still Working Very Long Hours - A Profile of Singapore's Older Family Caregivers

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Key Findings:

- Family caregivers aged 55-70 years are mostly the children of the elderly care recipient, while family caregivers above age 70 years are primarily spouses.
- Older family caregivers are in declining health themselves but are spending very long hours (up to 60 hours per week) caring for their family member.
- More than half of family caregivers aged 70-74 years do not receive help from anyone else to care for their family member.
- More than half of family caregivers up to the age of retirement (55-65 years) are juggling long hours of both formal employment and caregiving.
- Well beyond the retirement age, family caregivers are spending 50 to 60 hours per week caring for their older family member.

Introduction

As Singaporeans age, it is important to recognize that their family caregivers are also getting older. While the majority of family caregivers are middle-aged children (including children-in-law) of the elderly in need of care, data from the 2011 Singapore Survey on Informal Caregiving (SSIC) shows that 20% of family caregivers providing care to elderly persons aged 75 years and above with functional limitations are themselves above the age of 65 years. 5% of them are in fact spousal caregivers who are aged 80 years and older. The number of older family caregivers is likely to increase as Singapore's population continues to age. Little is known of this group of older family caregivers and the older persons whom they are caring for. Characterization of these older family caregivers is important to better understand their situation as they grow older and have to deal with their own health problems. This has implications for policy and practice, not least for designing programs for caregiver support tailored to older family caregivers.

This research brief provides a profile of Singapore's older family caregivers and the elderly persons they care for using the 2011 SSIC. In the SSIC, all the elderly care-recipients were aged 75 years and above with at least one activity of daily living (ADL) limitation, and the family caregiver was defined as a family member or friend (but not a foreign domestic worker) most involved in providing care or ensuring provision of care to the elderly person. The age threshold for defining 'older' caregivers varies widely in the literature ranging from those in their 50's to those in their 90's (Greenwood and Smith, 2016). We use a threshold of 55 years and above to define 'older' family caregivers and investigate differences between the young-old (55-59; 60-64), mid-old (65-69; 70-74), and old-old (75-79; 80+) family caregivers. In the overall Singapore population, we estimate that there are approximately 7,800 young-old, 2,800 mid-old, and 3,100 old-old family caregivers caring for older person 75 years and older (see Box 1).

Box 1: Calculation of estimated numbers of older family caregivers (55+) caring for elderly persons 75 years and older in the overall Singapore population

In the SSIC, of the 5607 older adults 75+ administered the ADL screener, 1211 met the criteria of elderly 'care recipient,' i.e. with at least 1 ADL limitation and with a 'caregiver.' We assume the same proportion (1211/5607) of caregivers in the overall Singapore population aged 75 years and above. The 2010 Singapore census shows that there are 134,054 older adults 75 years and above. Applying the same proportion as above to this elderly population ($134,054 \times 0.22$), we estimate that approximately 29,492 older Singaporeans 75 years and above require care and have a caregiver. Of the 29,492, we estimate the number of caregivers in each age and gender group based on the caregiver age and gender distribution in the SSIC. Numbers of caregivers rounded to the nearest 100 are shown below:

Caregiver

| Age | Men | Women | Total |
|--------------|-------------|-------------|--------------|
| 55-64 | 3000 | 4800 | 7800 |
| 65-74 | 500 | 2300 | 2800 |
| 75+ | 1300 | 1800 | 3100 |
| Total | 4800 | 8900 | 13700 |

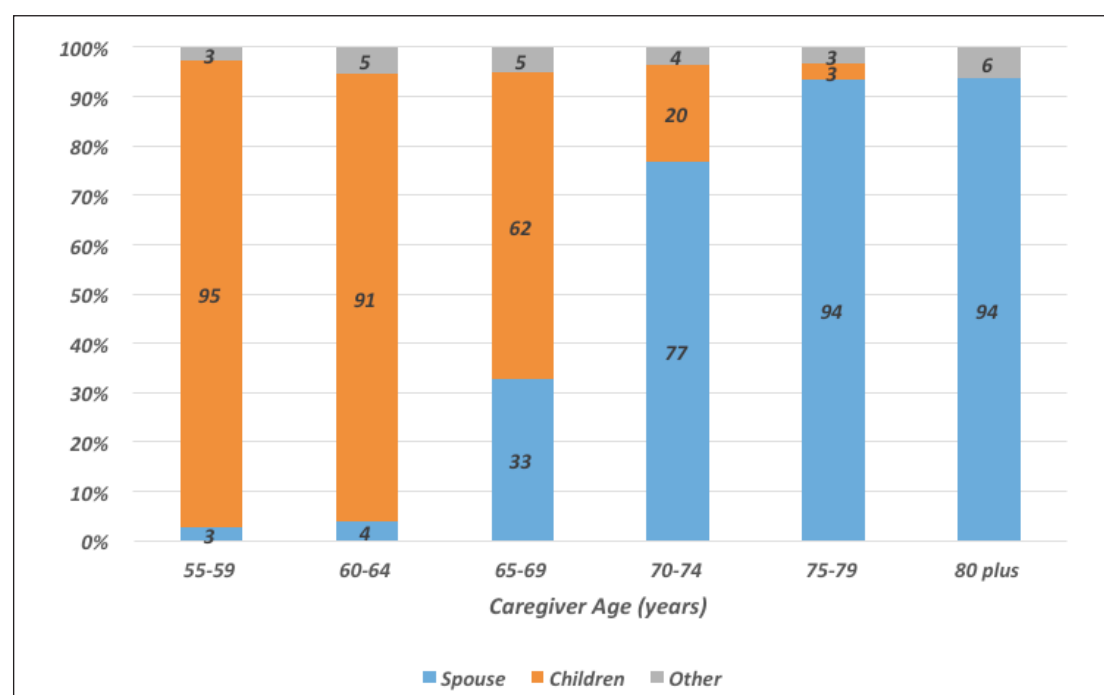
The three parts of this brief are:

- 1) A profile of older family caregivers, in terms of caregiver and care recipient demographics and socio-economic characteristics, and health status, by caregiver age.
- 2) An exploration of the amount of time older family caregivers spend caring for their family member in a typical week (in light of the reality that they themselves are getting older and may be in need of care themselves)
- 3) An exploration of how much caregiving time varies by specific types of care provided, whether caregivers receive help from another person, and caregivers' employment status.

Who are the older family caregivers?

Family caregivers aged below 70 years tend to be the children of the elderly care recipient (Figure 1). As the caregivers age, that balance shifts to the caregiver being the spouse of the care recipient. In fact, nearly all (94%) of the old-old (75 years and above) family caregivers comprise spousal caregivers. The small proportion of 'other' older family caregivers are the grandchildren, siblings, nieces, nephews, other relatives, and friends of the elderly care recipient.

Figure 1: Older family caregiver's relationship to the care recipient, by caregiver age.



Note: Figures in the table reflect column %s; HDB=Housing and Development Board

Characteristics of older family caregivers

Table 1 shows the demographic and socio-economic characteristics of older family caregivers. Similar to the profile of family caregivers in general, older family caregivers are predominantly female. Among the mid-old (aged 70-74) family caregivers, almost 90% are female. However, among the old-old caregivers (80 plus), the gender balance shifts with the proportion of male caregivers even slightly exceeding that of female caregivers (55% male vs. 44% female). Similar findings have been found in the United Kingdom (UK) where men in the 75-84 year age group are more likely to be in a caring role than women of the same age (Carers UK 2015). While the numbers are smaller, it appears healthy male survivors take up the position of being caregivers for their female spouses in their very old ages. Women have longer life expectancies but often spend more of their later life in disability and illness (Yong et al., 2011).

In every age group, the largest proportion of older family caregivers has a marital status of married. It is however notable that a considerable proportion of young-old and mid-old family caregivers, especially the former, have never married. This has implications for who would be caring for them when the need for such care arises in the not so distant future. Not surprisingly, the proportion of caregivers in full-time employment decreases as they age and reach retirement age. Before the usual age of retirement (65 years) more than half of caregivers are engaged in full-time or part-time employment. It is surprising however that even past the retirement age of 65, 25% of caregivers aged 65-69 and 9% of caregivers aged 70-74 are still either in full-time or part-time employment.

Young-old caregivers are more likely to have secondary and above education while the old-old caregivers are more likely to have no education.

Older family caregivers mostly live in 3 to 4 room Housing and Development Board (HDB) flats, and most perceive their financial situation to be adequate or more than adequate.

Table 1: Older family caregiver characteristics, by caregiver age

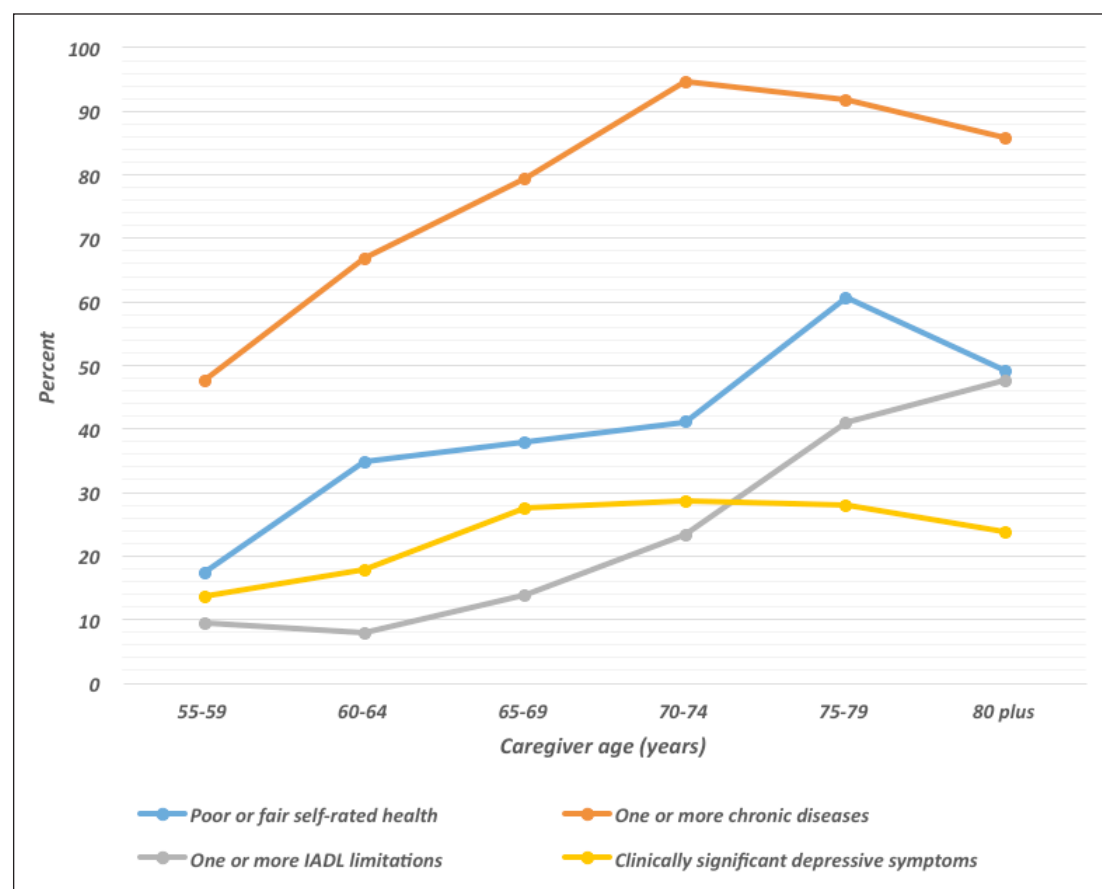
| Care recipient characteristics | Caregiver age (years) | | | | | |
|-------------------------------------|-----------------------|----------------|---------------|---------------|---------------|-------------|
| | 55-59 N=185 | 60-64 N=129 | 65-69 N=58 | 70-74 N=56 | 75-79 N=61 | 80+ N=63 |
| Gender | | | | | | |
| Male | 40.0 | 35.7 | 27.6 | 10.7 | 26.2 | 55.5 |
| Female | 60.0 | 64.3 | 72.4 | 89.3 | 73.8 | 44.4 |
| Marital status | | | | | | |
| Married | 64.3 | 44.2 | 69.0 | 83.9 | 95.1 | 93.7 |
| Widowed | 2.2 | 12.4 | 10.3 | 1.8 | 1.6 | 1.6 |
| Divorced / Separated | 6.0 | 12.4 | 5.2 | 0.0 | 1.6 | 0.0 |
| Never married | 27.6 | 31.0 | 15.5 | 14.3 | 1.6 | 4.8 |
| Work status | | | | | | |
| Full-time | 55.7 | 29.5 | 17.2 | 5.4 | 0.0 | 1.6 |
| Part-time | 8.7 | 20.9 | 8.6 | 3.6 | 3.3 | 0.0 |
| Not in formal employment | 35.7 | 49.6 | 74.1 | 91.0 | 96.7 | 98.3 |
| Education | | | | | | |
| No education | 2.2 | 10.9 | 6.9 | 44.6 | 50.8 | 34.9 |
| Primary education | 22.7 | 25.6 | 41.4 | 35.7 | 24.6 | 34.9 |
| Secondary education | 45.4 | 46.5 | 36.2 | 12.5 | 13.1 | 11.1 |
| Polytechnic diploma and | 29.7 | 17.1 | 15.5 | 7.1 | 11.5 | 19.1 |
| Housing type | | | | | | |
| 1 to 2 room HDB | 4.9 | 7.0 | 10.3 | 14.3 | 14.8 | 12.7 |
| 3 to 4 room HDB | 55.1 | 56.6 | 53.5 | 62.5 | 60.7 | 49.2 |
| 5 room plus HDB / Private | 40.0 | 36.4 | 36.2 | 23.2 | 24.6 | 38.1 |
| Perceived financial adequacy | | | | | | |
| More than adequate / Adequate | 60.1 | 53.5 | 53.5 | 46.4 | 45.9 | 50.8 |
| Occasionally inadequate | 25.1 | 31.0 | 22.4 | 35.7 | 24.6 | 34.9 |
| Inadequate | 14.8 | 15.5 | 24.1 | 17.9 | 29.5 | 14.3 |

Note: Figures in the table reflect column %s; HDB=Housing and Development Board

Deteriorating health as the caregivers get older

Older persons' health deteriorates with age, and this is no different among older family caregivers: Figure 2 shows older family caregivers' health status by their age. The proportion of older family caregivers reporting one or more chronic diseases, one or more instrumental ADL (IADL) limitations, or poor/fair self-rated health increases steeply with age. As an illustration, among the old-old caregivers, more than 40% have one or more IADL limitations, more than 80% have one or more chronic diseases, and 50 to 60% report their health to be poor or fair. It is clear that the physical health of older family caregivers is indeed worsening with age. However, in the oldest age group (80+), there is a decline in the proportion of caregivers with one or more chronic diseases or proportion that report their health to be fair or poor. This is most likely due to a healthy survivor effect where individuals who survive past age 80 tend to be healthier. In terms of emotional health, the proportion of older family caregivers with clinically significant depressive symptoms, though increasing from 15% at ages 55-59 to almost 30% at ages 60-64, remains stable at around 30% from age 65 onwards.

Figure 2: Health status of older family caregivers, by caregiver age



Note: IADL=Instrumental Activities of Daily Living; Clinically significant depressive symptoms equals a score of 7 or more on the Centre for Epidemiologic Studies Depression Scale (CES-D).

Characteristics of the elderly Singaporeans receiving care from older family caregivers

The characteristics of the care recipient reflects the changing caregiver-care recipient dyad by caregiver's age (Table 2).

Across caregiver age groups, the mean age of the care recipient ranges from 81 years to 87 years. Elderly persons receiving care from caregivers aged 60-64 and 65-69, primarily the older parent of the caregiver, are the oldest (86-87 years) and are more likely to be widowed. Older persons receiving care from caregivers aged 70 years and above are primarily the spouse of the caregiver and tend to be in the early 80's.

The health status of the care recipient does not vary noticeably by the age of the caregiver. While this is not surprising given that the age profile of the care recipient does not differ by caregiver age, what this highlights is that the health needs of the elderly care recipients of the young-old, mid-old, and old-old family caregivers are very similar, and that even the old-old caregivers are dealing with the complex health needs of their elderly care recipients even when they are getting older and less healthy themselves.

Table 2: Characteristics of the elderly care recipient, by caregiver age

| Care recipient characteristics | Caregiver age (years) | | | | | |
|---|-----------------------|----------------|---------------|---------------|---------------|---------------|
| | 55-59 N=185 | 60-64 N=129 | 65-69 N=58 | 70-74 N=56 | 75-79 N=61 | 80+ N=63 |
| Age, mean (s.d) | 84.4 (5.3) | 87.1 (5.6) | 85.9 (6.4) | 83.3 (7.1) | 81.2 (5.1) | 82.9 (4.6) |
| Gender | | | | | | |
| Male | 15.7 | 17.1 | 41.4 | 69.9 | 70.5 | 41.3 |
| Female | 84.3 | 83.0 | 58.6 | 30.4 | 29.5 | 58.7 |
| Marital status | | | | | | |
| Married | 14.0 | 14.7 | 36.2 | 76.8 | 91.8 | 93.7 |
| Widowed | 84.3 | 84.5 | 62.1 | 21.4 | 6.6 | 1.6 |
| Divorced / Separated | 0.5 | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 |
| Never married | 1.1 | 0.8 | 0.0 | 1.8 | 1.6 | 4.8 |
| Poor or fair self-rated health | 80.0 | 83.7 | 82.8 | 87.5 | 86.9 | 79.4 |
| Two or more chronic conditions | 90.8 | 84.5 | 93.1 | 82.1 | 91.8 | 88.9 |
| Two or more ADL limitations | 85.4 | 91.5 | 86.2 | 85.7 | 77.1 | 92.1 |
| Clinically significant depressive symptoms | 39.8 | 26.9 | 33.3 | 41.4 | 44.4 | 24.3 |
| Moderate or severe cognitive impairment | 36.4 | 28.9 | 55.6 | 17.2 | 13.9 | 24.3 |

Notes: Unless otherwise mentioned, figures in the table reflect column %s; ADL= Activities of Daily Living; Clinically significant depressive symptoms equals a score of 7 or more on the Centre for Epidemiologic Studies Depression Scale (CES-D).

Time spent by older family caregivers in caring for elderly care recipients

The next sections examine the amount of time older family caregivers spend caring, and whether the amount varies with caregiver age. We examine the weekly time spent on three aspects of care: 1) ADL-related care, 2) IADL-related care, and 3) Non ADL or IADL-related care (this is derived by subtracting the reported total number of ADL-related care hours and IADL-related care hours from the reported "Overall" care hours) [see Box 2].

Box 2: Questions asked from the caregiver for assessing overall care hours, Activity of Daily Living (ADL)-related care hours, and Instrumental ADL (IADL)-related care hours

Overall care hours

On average, how many hours do you spend caring for or ensuring provision of care for (name of care recipient) in a typical week?

ADL-related care hours

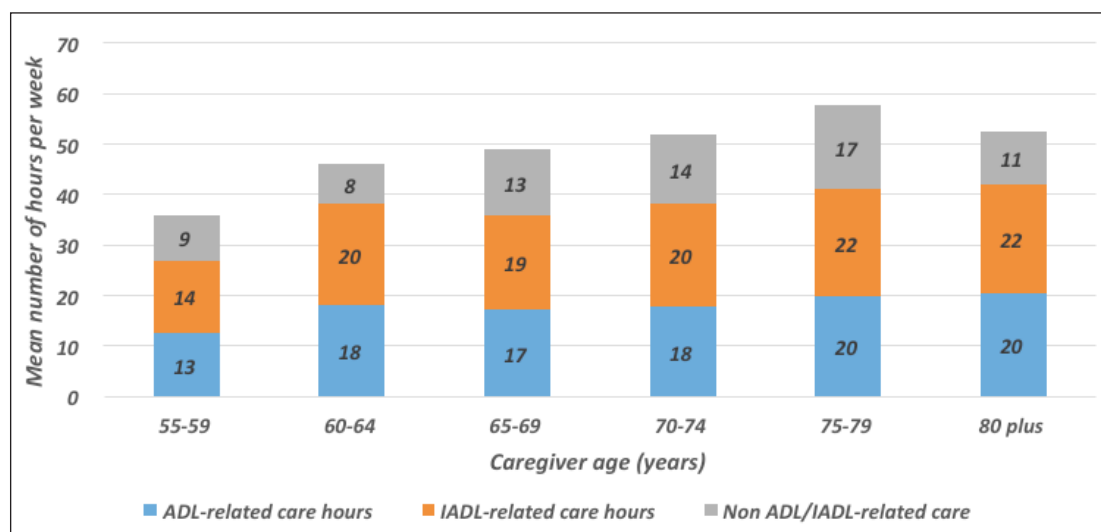
On average, about how many hours do you spend in a typical week helping (care recipient) perform these seven activities i.e. eat; dress and undress; take care of his/her appearance; walk; get in and out of bed; take a bath or shower, and use the bathroom or toilet?

IADL-related care hours

On average, about how many hours do you spend in a typical week helping (care recipient) perform these activities i.e. use the telephone; get to places out of walking distance; go shopping; prepare meals; do housework; take medication; and handle money?

Figure 3 shows that, on average, the overall care hours for older family caregivers' ranges from 35 hours to 60 hours per week. And, the overall care hours increase with caregiver age, peaking at ages 75-79 years. Caregiver's aged 55-59 years spend the least amount of care hours, be it overall or ADL-related or IADL-related care hours. It is most notable that the caregivers who are supposedly beyond "retirement age", spend more time caregiving for their older family member than non-retired Singaporeans spend at work. The value of this substantial contribution needs to be recognised. Whilst the long hours that caregivers spend caring may not always have an adverse impact on them, the potential toll and challenges that the situation present should be acknowledged. Without more support, it is not only unlikely to be sustained but will also adversely affect their own health.

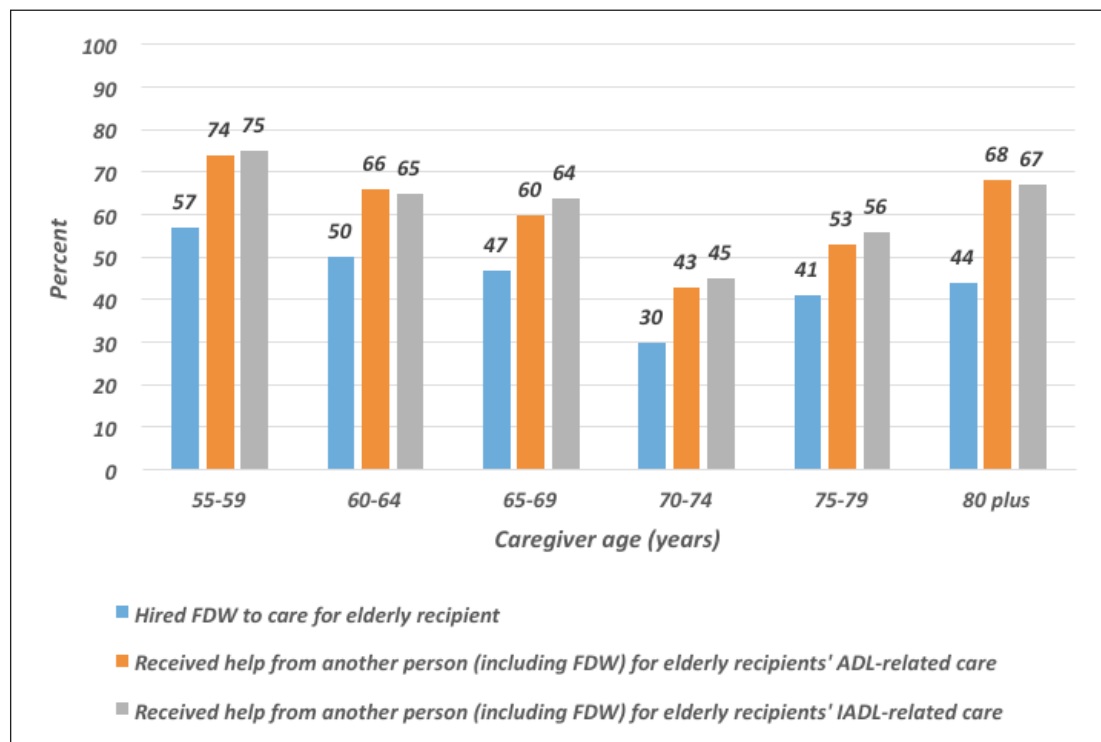
Figure 3: Weekly time spent by older family caregivers in caring for elderly care recipients, by caregiver age



Help received by older family caregivers in care provision

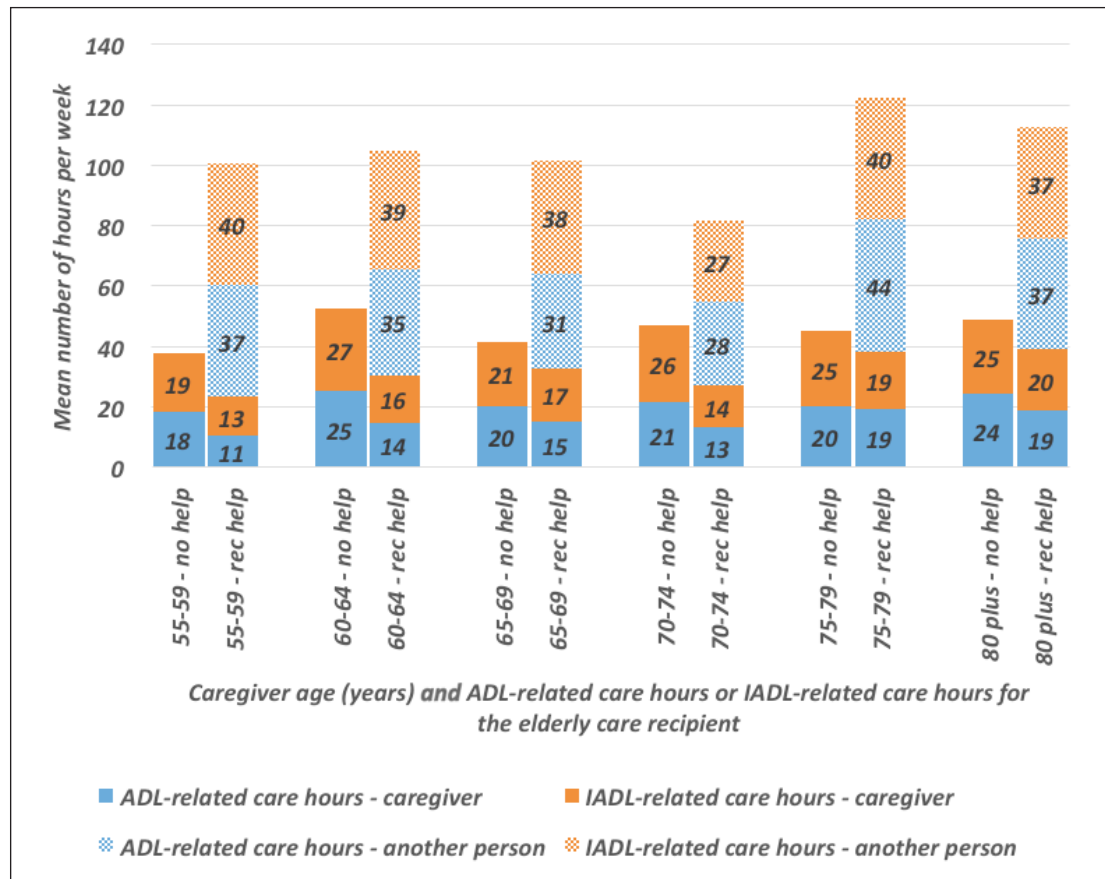
Most caregivers, though primarily responsible for providing care or ensuring provision of care for their recipients, often receive help from another person – either from a foreign domestic worker (FDW) or other family members or friends. The SSIC shows that about half of all family caregivers in Singapore have hired a FDW specifically to care for their elderly care recipients. Figure 4 shows that among older family caregivers, the proportion that have hired a FDW specifically to care for their elderly care recipient is the highest for caregivers aged 55-59 years (57%) and the lowest for caregivers aged 70-74 years (30%). Similarly, the proportion of caregivers who have received help for the elderly care recipients' ADLs or IADLs in the last month from another person (including an FDW) is highest for caregivers aged 55-59 years (74-75%) and the lowest for caregivers aged 70-74 years (43-45%). At the same time, it is important to emphasize that more than half of caregivers aged 70-74 years did not receive help for the elderly care recipient's ADLs or IADLs from another person in the past month. At the community level, establishing evidence-based fall-prevention programmes has been proven to be effective in reducing falls. Typically, the goals of these programmes are to increase awareness of falls among older adults and to teach them exercises that can improve strength and balance. Such programmes are less costly compared to hospital-based programmes because they can be conducted by trained layperson leaders or volunteers. There is also a need for more research to be done in investigating the effectiveness of local and localized fall-prevention programmes incorporating the initial significant risk factors found in this study. The development of a more consolidated evidence-based fall prevention effort at the national level would be timely, given Singapore's rapidly ageing population.

Figure 4: Help received by older family caregivers in care provision, by caregiver age



Among caregivers who receive help from another person (including FDW) in the last month, the average number of hours of additional help caregivers report receiving per week for the elderly care recipients ADLs or IADLs is substantial. Caregivers receive an additional 28 to 44 hours of ADL-related care hours and an additional 27 to 40 hours of IADL-related care hours per week for their elderly care recipients. Caregivers who do not receive any help from another person provide 40 to 50 ADL-related or IADL-related care hours per week, which is similar across the young-old, mid-old, and old-old caregivers (Figure 4).

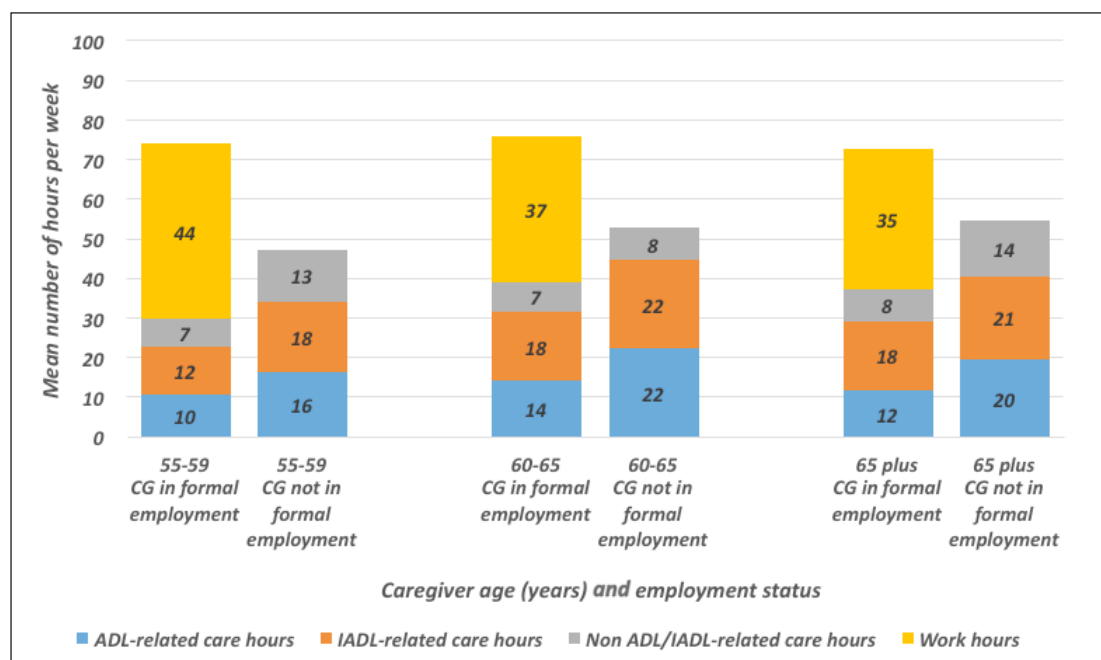
Figure 4: ADL or IADL-related care hours: Hours per week spent by caregiver or another person (including FDW) by caregiver age and whether or not receiving help for ADL/IADL-related care for the elderly care recipient



Work and caregiving hours

Table 1 (above) shows that more than half of older family caregivers up to the age of 65 are engaged in either full-time or part-time employment in addition to their caregiving responsibilities. Hence, a considerable proportion are juggling both long work and caregiving hours even in their old age. The overall care hours from older family caregivers in formal employment is, as expected, substantially lower compared to overall care hours from older family caregivers not in formal employment. However, older family caregivers in formal employment are still spending an average of 35-44 hours per week in employment over and above the 30-40 overall care hours per week. Older family caregivers who are not in full-time or part-time employment provide 50 or more overall care hours per week on average. In fact, the average number of overall care hours increases with caregiver age for both caregivers in and not in formal employment (again in spite of the fact that the caregivers own health is deteriorating).

Figure 4: Time spent caring for recipient and work hours per week by caregiver age and employment status



Summary of Key Findings

The findings from the 2011 SSIC study indicates that a sizeable proportion of family caregivers in Singapore are older and in deteriorating health themselves. The data indicates that 20% of informal family caregivers are above the age of 65 and 5% are above the age of 80. More than 80% of caregivers aged 65 and above have their own chronic diseases to manage. Despite their own deteriorating health, older caregivers who are well beyond “retirement age”, spend very long hours (up to 60 hours per week) providing care to their family members. Furthermore, a significant proportion of these caregivers are providing the care without support from others.

Policy and practice implications

In Singapore, the family is considered to be the first line of support for eldercare. With Singapore’s rapidly aging population and shrinking family sizes, the number of older family caregivers is set to rise. This parallels the increasing number of older family caregivers in other countries. For example, as of the latest 2011 census, in the UK, there were nearly 1.2 million caregivers aged 65 and above. Caregivers aged 85 and above were in fact the fastest growing group of caregivers in the UK. A survey done by Age UK shows that the number of carers aged 80 and above has increased from 300,000 in 2009 to 417,000 in 2016, and continues to rise (Hill, 2016).

It is critical to understand the challenging situation faced by this rising number of caregivers - they are growing older in declining health, and spending a major proportion of their time in their old age caring for someone else. Furthermore, the old-old amongst them are mostly spouses and are less likely to hire FDW's or receive help from other persons. While Singapore already has in place levy concessions for hiring of FDWs for an older person, more should be done specifically for older family caregivers to ensure that they get the help they need whether in terms of hired help, help from service providers, or help from family and friends.

It is of concern that older family caregivers' own health continues to deteriorate as they age. Policies and programmes should be directed at adequately monitoring the health of older family caregivers with support provided to enable them to manage their own health, as they may not have the time or resources to take care of themselves. The proactive investment in the health of family caregivers makes good economic sense for the country in the long term. Family caregivers' good health sustains both themselves and their caregiving efforts; without which demands for acute and formal long term care can emerge - a major concern with population ageing.

Despite their ailing health, older family caregivers are spending up to 60 hours per week caring for their elderly relatives. Studies from other countries have similarly shown that older family caregivers spend very long hours in their caregiving roles and the amount of caregiving hours actually increases with age of the caregiver (The Princess Royal Trust for Carers UK 2011). A considerable proportion of older family caregivers are also juggling both work and caregiving at the same time and are spending 35-44 hours per week in formal employment on top of the 30-40 hours of care hours.

Services that offer respite for both working and non-working caregivers should be more specifically targeted to older family caregivers as previous research has found that caregivers may not be aware of services that are available to them or may not feel the need to access such services (Ajay et al., 2017).

This profile of older family caregivers has shown that older family caregivers have extensive health and support needs. If Singapore is to continue relying on the family for the care of their elderly, it is imperative that this growing group of ageing caregivers are acknowledged and appreciated. They should receive appropriate interventions and the support needed to not only manage the care of their family members but also what is needed for their own health and well-being.

Reference

1. Carers UK and Age UK, Caring in later life. 2015. The growing pressure on older carers. Carers UK: London.
2. Carers Trust. 2015. Caring about older carers providing support for people caring in later life. Carers Trust.
3. Grant, Gordon and Nolan, Mike. 1993. Informal carers: Sources and concomitants of satisfaction. *Health and Social Care in the Community* 1: 147-159.
4. Greenwood, Nan and Smith, Raymond. 2016. The oldest carers: A narrative review and synthesis of the experiences of carers aged over 75 years. *Maturitas* 94: 161-172,
5. Hill, Amelia. 2016. 'We had no choice': number of elderly filial carers on the rise in UK. *The Guardian*, October 2016.
6. Princess Royal Trust for Carers. 2011. Always on call, always concerned. A survey of the experience of older carers. Princess Royal Trust for Carers: Essex.
7. Shweta Ajay, Østbye T, Malhotra R. Caregiving-related needs of family caregivers of older Singaporeans. *Australasia J Ageing*. 2017; 36(1): E8-E13.
8. Yong, Vanessa, Yasuhiko Saito, and Angelique Chan. 2011. Gender differences in health and health expectancies of older adults in Singapore: an examination of diseases, impairments, and functional disabilities. *Journal of Cross-Cultural Gerontology* 26: 189-203.

Publisher

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CARE's vision is an ageing population that is healthy, socially included and enjoys a high quality of life.

CARE's mission is to:

- Provide an environment that enables interdisciplinary research and education on ageing
- Implement and evaluate best practices to improve health and function of older adults
- Inform policy and practice agenda on ageing

DATA SOURCE

We used the Singapore Survey on Informal Caregiving (SSIC) of 1190 care recipient-caregiver dyads, conducted in 2010 to 2011 by the Ministry of Social and Family Development (MSF). The care recipients were 75 years and over and required human assistance with at least one Activity of Daily Limitation (ADL). The analytic sample used for this study are 552 family caregivers aged 55 years and above and their elderly care recipients.

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