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The Irish Longitudinal Study on Ageing

Introduction

TILDA completed collection of its fifth wave of data in 2018. There is now 10 years of follow-up information collected since the inception of the study, which offers great opportunities for a deeper understanding of the process of ageing and for enhanced global collaboration by harmonisation with other international datasets which have been collecting data for over 10 years. In February 2020, the world was stunned by the global spread of the coronavirus pandemic. In consequence, we urgently repurposed our analysis of data from Wave 5 to better inform policy and the public understanding of risk factors and implications of COVID-19. During the pandemic, we also undertook a separate COVID-19 study with participants to determine the prevalence of infection and the impact of COVID-19 restrictions on people's lives. The results of that study will be the subject of a forthcoming report. The present report will provide context and set the scene regarding the experience of older adults and their families prior to the pandemic.

The chapters in the report cover key issues such as risk factors for COVID-19 infection, including frailty, multimorbidity and medication usage; the utilisation of healthcare and home care and the types of health coverage; the contributions of older people to Ireland's society and economy; access to and use of the internet among the older population; and data on TILDA participants in nursing homes.

1.1 TILDA data collection

Collection of participant data involved two components: a computer-assisted personal interview (CAPI) and a self-completion questionnaire (SCQ). The CAPI is administered by a trained social interviewer in the participant's own home. The participant answers questions on their health, economic, social and family circumstances. The vast majority (98%) of CAPI interviews are conducted as self-interviews, where a participant is capable of answering some or most questions.

Of the 6,813 eligible participants before Wave 5, 5,397 completed a form of interview at Wave 5. The vast majority of CAPI participants complete an interview on their own (n=5,101), with lower numbers completing proxy (n=124) and EOL (n=172) interviews. The response rate of Wave 5 is calculated as the number of completed self-interviews in

Wave 5, relative to the total number of potential interviews. The total CAPI response rate achieved in the 10th year of TILDA is 81%

The overall SCQ response rate is 86% (n=4,410, mean age = 69 years). The highest response rate (90%) is among the 65-74 years age group.

In some cases, a participant may be unable to take part in the interview due to a physical or cognitive impairment; in these cases, a proxy respondent, such as a close relative or friend, is sought to complete the interview on behalf of the original participant. A total of 124 proxy interviews were completed by a close relative or friend on behalf of the original participant, achieving a response rate of 57%.

Although TILDA is nationally representative of the older community-dwelling population in Ireland, patterns of response to each component of the study (CAPI, SCQ) vary across certain subgroups of the sample. Participation in later waves of the study is also influenced by levels of participation at earlier waves and by sample attrition. To account for these systematic differences in responses and to ensure that the estimates derived from the sample remain representative of the target population, a number of weights were calculated and applied to different analyses. Weighting ensures that, for the estimates calculated, subgroups within the sample are proportionate to the number of that subgroup in the population of Ireland.

1.2 Frailty is a dynamic process that changes over time and can be viewed on a continuum

Frailty was identified early in the pandemic as a major risk factor for severity of response to infection. Frailty affects 18% of adults aged 58 years and over, 22% aged 65 years and over and 33.3% aged 75 years and over in Ireland. There are a number of ways to define frailty and this is still an area of important ongoing research. We use one of the most common instruments to measure frailty – the frailty phenotype. Frailty is almost twice as prevalent among women as it is among men (22% versus 13%), and three times more prevalent at lower levels of educational attainment (29% for highest educational level at primary level versus 10% for third level).

Among those aged 58 years and over, 10% are living alone, of whom 23% live alone with frailty. Among those aged 75 years and over who live alone, 44% have frailty. Half of adults aged 58 years and over living with frailty also have a disability in either basic or instrumental activities of daily living. People living with frailty are more likely to experience lower levels of cognitive function at all age groups.

Frailty can be avoided, delayed and reversed with timely and appropriate interventions, both at the individual and population levels, with early disease detection and treatment and physical activity and other lifestyle modifications.

1.3 Understanding the prevalence of multimorbidity, medications and behavioural health factors at a population level facilitates the planning and delivery of services in critical periods

Chronic conditions and the use of certain medications have been identified as risk factors for severity of COVID-19 infection, as have lifestyle factors such as smoking and the amount of physical exercise done. Understanding the prevalence in the older population of these conditions, and of prescription of the relevant medications and the commonness of relevant lifestyle factors at different age groups, is crucial for planning and delivery of healthcare during critical periods such as the COVID-19 pandemic. It is also essential for projection of future healthcare needs at the population level, which, put together with lessons from the current pandemic, will inform strategy for response to future shocks.

Multimorbidity is defined as the co-existence of two or more chronic conditions, and evidence suggests this is the norm rather than the exception in older adults in Ireland. Multimorbidity is associated with age. Less than ten percent of adults aged 58 years and older report no conditions, with almost three quarters reporting the presence of two or more conditions. Hypertension (52%), high cholesterol (59%) and arthritis (46%) were the most commonly reported conditions. The percentage reporting arthritis almost doubles from 32% in adults aged 58-64 years, to 60% in those aged 75 years and over.

Regular use of medications also becomes increasingly common in older adults, with close to half of adults aged 75 years and older reporting use of five or more medications regularly. Use of anti-hypertensive medication was reported by almost half of participants, and became increasingly prevalent in older age groups, with similar reported use in both male and women. Use of anti-depressant and sleep medication however was more commonly reported by women, with little difference in use across age groups.

TILDA also collects information on behavioural health. Participants are asked about smoking and physical exercise, two major determinants of health. The impact in particular of high levels of exercise is shown on multimorbidity and medication usage. Use of anti-depressant, anti-hypertensive and sleep medication were all lowest in those reporting high physical activity compared to low physical activity. 57% of adults reporting low physical activity reported use of anti-hypertensive medication, compared to 42% of those reporting

high physical activity. The prevalence of use of anti-depressant medication was almost twice that in those reporting low physical activity (15%) compared to high physical activity (8%), while 14% reporting low physical activity reported use of sleep medication compared to 5% of those reporting high physical activity.

These data show that modifiable behaviours can play a significant role in healthy ageing. Public health initiatives with a preventative focus will contribute significantly to the readiness of the health system to meet any future crises.

1.4 Home-bases supports, including home modification, are less commonly accessed than other health services

In 2018, the General Practitioner was the most commonly used service, by 93% of participants in the previous year. 46% attended a hospital outpatient clinic, with 20% using the emergency department and 16% having an overnight stay in hospital. Only 4% of the population report receiving home help or personal care services, and 5% using community nursing, while 8% report receiving informal care from family or friends. Similarly, only 8% of the population had ever had home modifications for health reasons, with a majority not receiving state help in financing them.

The most commonly used allied health service in the previous 12 months was the optician (15%). Approximately 1 in 10 visited the dentist and 6% utilised community-based physiotherapy. Community-based dietetics, hearing services, psychological or counselling services, and social work were used by fewer than 5% of the population aged 58 years and older.

Patterns of health service utilisation remain heavily oriented to the provision of medical services, with older adults comparatively rarely utilising community-based allied healthcare, or those community-based services which support ageing in place. These trends indicate potential challenges for older adults in accessing services which focus on pre/rehabilitation in the community (e.g. physiotherapy), which address risk factors for frailty (e.g. dietetics), which provide support for loss of functional capacity (e.g. home help) or those services which offer a social outlet for an older adult or respite for an informal carer (e.g. day centre care). These challenges for access may be considerably exacerbated by the COVID-19 pandemic, which has seen elective treatments deferred, older people putting off GP visits and reduced availability of home care workers.

1.5 The older population continues to make vital social and economic contributions to Irish society

TILDA data clearly show the enormous contribution made by older people to the social and economic life of the country. Overall, 41% of adults aged 58 years and older provide some kind of regular help and/or care for their spouses, relatives (not including grandchildren), neighbours and friends. 42% of men and 50% of women who have living parents report they regularly helped them with household chores and tasks. The older population also help their friends and neighbours with household tasks; 14% of men and 12% of women aged 58-64 and 15% of men and 12% of women aged 65-74 report helping their friends and neighbours with household tasks. A lower but still substantial number (8%) aged 75 years and over also report providing friends and neighbours with this help. Grandchild care is very common in the older population, and 42% of older adults report that they looked after their grandchild in the last month. This increased from 40% of men aged 58-64 to 54% of men aged 65-74 years (54%) and remained high in both men (30%) and women (21%) aged 75 years and older.

Overall, 55% of men and 51% of women report that they volunteered in the past year. The three most common reasons given for volunteering were because they enjoyed it; so that they could use their skills; and so they could contribute something useful. 90% of adults participate in active and social leisure activities each month, while 72% participate in organised groups such as sports groups, book clubs, or charitable organisations.

Government advice during the COVID-19 pandemic that those over 70 remain at home or 'cocoon' as far as possible meant that older people were disproportionately affected by the pandemic. Opportunities for social activities and engagement were curtailed, as were those for volunteering. Given the extent of these activities among the older adult population and the benefits of them to older adults, their families and the wider community, removal of opportunities for these activities is likely negatively to affect older adults' wellbeing.

The lack of availability of childcare for working families normally provided by grandparents may also exacerbate inequalities in the economic impact of the pandemic, as those most financially dependent on informal or familial support will be disproportionately affected. Similarly, frontline and essential workers who have continued going out to work during the pandemic will not have had these family supports for childcare and household help normally available to them.

1.6 Internet access is common among older people, with use frequent and varied

Data show that internet access is common among the older population, and that it is used often and for a variety of purposes. 80% of adults aged 58 years and older have access to the internet in their homes. Internet access decreases with age. Only 58% of those aged 75 years and older have home internet access, compared to 94% aged 58-64 years, and 83% aged 65-74 years. 70% of adults aged 58 years and older use the internet daily, and at least 87% weekly. There is some disparity between urban and rural access, with 83% of urban dwellers and 75% of rural reporting access.

66% of adults aged 58 years and older have access to a smartphone or tablet, and so to apps. This also decreases with age, with 84% aged 58-64 years, and 69% aged 65-74 years having access, but only 42% of those aged 75 and over.

Searching for information (81%) and sending emails (73%) are the most common reasons for using the internet. Women us the internet for social media significantly more than men (57% vs 40%) and for audio/video calls (47% vs. 41%) and gaming/apps (21% vs. 14%). Men use the internet slightly more often than women to get news (60% vs. 56%) and for financial transactions (60% vs. 58%).

Internet access has become more important in light of the COVID-19 pandemic. As restrictions are placed on travel and movement, older people are advised to 'cocoon' and employees to work from home, use of the internet for work, shopping (including delivery of essentials), communication and social contact has become more a focus of public attention, and in time may become a greater focus of public policy. The urban/rural disparity in access, and the fact that 36% of those over 58 living alone report no access to the internet, have implications for connectedness and ability to navigate systems as more activities and opportunities move online.

1.7 Nursing home residents who can self-report rate their health and quality of life higher than rating by proxies

The COVID-19 pandemic brought renewed focus on to nursing homes in Ireland. Restrictions on visitors and on mixing, and the advice for older people to 'cocoon', meant that nursing home residents could not see family or friends, go out as frequently or gather and interact with other residents in common areas. The estimated 30,000 people living in nursing homes faced disproportionate likelihood of adverse outcomes during the COVID-19 pandemic. Nursing home residents had higher risk of infection due to higher prevalence of frailty and serious illness, and this risk was magnified by residential care environments, where people live together in close quarters and staff supportive care involves a lot of physical contact.

TILDA nursing home participants were chronologically very old, had very high levels of physical and cognitive morbidities, and very high levels of physical disability. Where TILDA nursing home participants were able to self-report, however, a majority reported that their physical and mental health was fair, good, very good or even excellent. Though the sample of self-reporting participants is too small (n = 39) to make inferences about the population of nursing homes, only 5 rated their health as 'poor', with 12 rating it 'fair' and 22 'good, very good or excellent'. Not being able to self-report was mostly associated with the presence of cognitive and communication problems, including dementia.

The personal perspectives of our TILDA nursing home participants provide an important reminder that quality of life is often rated higher by oneself than by proxies, even in the presence of very advanced age and extensive comorbidities and disabilities.

1.8 Conclusion

The findings in our Wave 5 report reinforce some findings from previous waves, for example that frailty is not an inevitable consequence of ageing, and that modifiable health behaviours (stopping or reducing smoking, and increasing physical exercise) are very important drivers of positive health outcomes. Access to home-based supports, including home modification, is shown to be comparatively rare within the range of available allied health services. The findings emphasise the contributions, direct and indirect, made by older adults to the social and economic life of the country. On the whole, older adults have access to the internet and are engaged with a variety of online services and activities. The findings also show that, somewhat against common perception, including the perception of proxies, those in residential care perceive themselves as maintaining good health and a high quality of life.

This snapshot of the older population of Ireland on the eve of the COVID-19 pandemic will give a baseline allowing us to gauge its longer-term impact. It will allow researchers to identify negative impacts on health and wellbeing, and also positive developments, for example greater resilience or the development of new technological skills or participation in new activities.