

# New Zealand Longitudinal Study of Ageing

# **OVERVIEW**

The New Zealand Longitudinal Study of Ageing (NZLSA) was developed in a decade in which those aged 60 and over have become the fastest growing population in the world. The population of New Zealanders aged 65 and over is projected to double over the coming 30 years to constitute 25% of the population by 2040, while the number of oldest-old (those Ltor: Brendan Stevenson, Charles Waldegrave, Dr Peter King, Professor aged 85 and over) will expand more than 5fold to constitute 5% of the population.



Fiona Alpass, Professor Christine Stephens, Dr Andy Towers. Top: Vicki Beagly Bottom: Dr Sally Keeling

In 2008 the New Zealand Foundation for Research, Science and Technology awarded 5 years funding to develop the New Zealand Longitudinal Study of Ageing. The NZLSA research team comprises the principal investigators from the Health and Ageing Research Team (HART) at Massey University and research leaders from New Zealand's Family Centre Social Policy Research Unit. The NZLSA was funded for two data collection waves (2010 and 2012) with the objective of establishing a nationally representative longitudinal study of ageing.

The NZLSA is a population-level study which aims to identify the health, wealth and social factors underpinning successful ageing in New Zealand's community dwelling population aged 50-84. The specific aims of NZLSA are to make observations and test hypotheses about the contributions to ageing people's quality of life within three broad areas: economic participation (e.g., meaning of work, employment, retirement); social participation (e.g., family support, social capital, participation); and resilience and health (e.g., physical, emotional, cognitive).

This brochure highlights some of our key findings. More detailed reports and publications from this and other HART studies are available from our website (http://www.massev.ac.nz/hart).













### PACIFIC PERSPECTIVES ON AGEING IN NEW ZEALAND

The research strand in NZLSA which focused on Pacific perspectives on ageing in New Zealand involved a number of complexities. The first is that 'age' and 'ageing' in Aotearoa New Zealand is mono-culturally defined, and Pacific perspectives on age, the aged, and the process of ageing are absent from the literature. Secondly, despite information being available on key aspects of Pacific societies such as the way they are organised, decisions made, and responsibilities

assigned, as well as material on the ties, benefits and obligations of kinship, the knowledge about the process of age and ageing that is held by Pacific cultural groups has in the main, not been committed to written text by Pacific scholars. The struggle to rethink and talk about age, ageing, and the aged, from a Pacific perspective that is relational, spiritual, connected to ancestors and to future generations and further connected to land, and to the waters is an onerous task in the face of primarily monocultural definitions, policy settings, and service delivery. This research begins the process of gathering and documenting the rich Pacific concepts, beliefs and values around the issues of Elders, Eldership, age and ageing.

Tamasese, T. K., Parsons, T. L. and Waldegrave, C.T. (2014) Pacific Perspectives on Ageing in New Zealand: Pacific-focussed Qualitative Research. Prepared for the New Zealand Longitudinal Study of Ageing (NZLSA), Wellington: Family Centre

## **EARTHQUAKES & DISASTERS**

Following the Canterbury earthquakes, NZLSA asked a number of questions to gain some understanding of whom the earthquakes affected and how. In a poster presentation for the 2013 RHISE (Researching the Health Implications of Seismic Events) conference, Dr Sally Keeling reported on how these effects varied by distance from Christchurch in health, social and economic domains. These findings showed that 30% reported that they had experienced earthquake effects and nearly 40% had provided personal support to family and friends in Christchurch. Increased social connections within and beyond the Canterbury region appeared to bring benefits to participants who suffered earthquake effects. This was reflected in reduced increases in loneliness. However, deteriorating mental health also varied by region and by whether one had experienced an earthquake event.

In related work, Robyn Tuohy has been looking at the impact of disasters on older adults. The stories of participants in her research showed that the outcomes of this disruptive event were affected by a combination of personal needs, social relationships, and the broader social context.

Keeling, S., Alpass, F., Stephens, C., & Stevenson, B. (2013). 'Ripple effects' on older people of the Canterbury Earthquakes: Results from a national longitudinal study. Poster presented to 2013 RHISE conference, Christchurch. NZMJ, 126 (1386), 23.

Tuohy, R., & Stephens, C. (2011). Exploring older adults' personal and social vulnerability in a disaster. International Journal of Emergency Management, 8 (1), 60-73.

#### **VOLUNTEER & UNPAID WORK**

Early findings from the Health, Work & Retirement study (which preceded NZLSA)



found that those who take part in activities to help others without pay (often older retired people) also report more happiness and better health. Those in more hardship were more likely to be happier when they volunteered more, than those with greater comfort in their living standards. This earlier work also found that Māori and those with greater hardship volunteered more often than non-Māori and those with comfortable living standards.

The NZLSA study looked at differences in outcomes after re-

tirement for Māori who had filled a role on their marae in 2012. Generally, older Māori were well connected to their marae and whānau, with a quarter having key roles on their marae such as kai mahi, ringa wera, kai karanga, & pou korero. Over time, a common pattern emerged: Two or three years prior to retirement participants who filled a role on their marae, reported lower mental health, self-rated health, economic living standards and quality of life com-



pared to those who had not filled a role on their marae. Following retirement, this difference disappeared for economic living standards or reversed with Māori who filled roles on their marae scoring higher self-rated health, mental health & quality of life.

Dulin, P., Gavala, J., Kostick, M., McDonald, J., & Stephens, C. (2012). Volunteering predicts happiness among older Maori and non-Maori in the New Zealand Health, Work, and Retirement Longitudinal Study. *Aging and Mental Health*. 16(5), 617-624, DOI: 10.1080/13607863.2011.641518

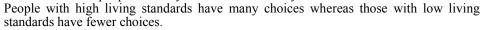
Stevenson, B. (2014). *Pathways to Retirement for Māori*. Summary report for NZLSA, Palmerston North: Massey University.

Stephens, C. Breheny, M., Dulin, & Alpass, F. (2013). Giving and receiving: understanding volunteering and wellbeing for older people in terms of reciprocity. *Gerontologist*, 53, 186-187.

#### **OUALITY OF LIFE**

People with greater purpose in life generally reported more happiness and life satisfaction, and better cognitive functioning. They also reported fewer symptoms of depression, and this was particularly true for those with poor mobility.

Looking at living standards and quality of life in terms of capabilities, rather than material resources, a new measure focuses on older people's ability to choose what they value.



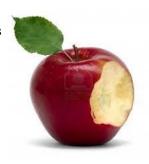
Dr Peter King meanwhile found evidence of "subjective wellbeing homeostasis" with scores for subjective happiness and satisfaction with life increasing with age; as scores for functional measures decline (e.g. living standards, health).

Breheny, M., Stephens, C., Alpass, F., Stevenson, B., Carter, K., & Yeung, P. Development and Validation of a Measure of Living Standards for Older People (2012). *Social Indicators Research*, DOI 10.1007/s11205-012-0188-4.

King, P. (2012). Living Standards and Wellbeing: Results from the NZLSA 2010 postal survey. *NZLSA 2012 Wellington Policy Seminar Findings and Policy Implications*. Victoria University of Wellington. King, P. (2014). *Application of the ICECAP-A measure*. Summary report for the New Zealand Longitudinal Study of Ageing. Wellington: Family Centre Social Policy Research Unit.



As people grow older their physical health status tends to deteriorate, while mental health may improve. These changes are very gradual across the years from 50 to 80+ and very little change was observed between 2010 and 2012 in the NZLSA sample. As people age, they also tend to have more need of health services, and to use them more. In our results, these changes are incrementally small, and there was not a great increase in frequency of health care use for those over 70 years. A small number of older people did report being unable to access health services and this could be the focus of concern.



Overall, our results provide a clear picture of the systematic relationship of health with socioeconomic status. As expected, those with lower education, income, and living standards, reported poorer physical health (but not mental health). These findings are also implicated in the contradictory findings for health related behaviours. Those who smoked, and past smokers, reported poorer health as expected, but despite the very high levels of alcohol use reported, alcohol use was related to better health. This is very likely because alcohol use was also related to income and living standards. Whether this high level of alcohol use among the well to do young- old will cause health problems in the future is another issue of concern.

The strongest relationship with both physical and mental health was for loneliness. The more loneliness reported by participants, the poorer their health. This is an important consideration as loneliness can be an issue for older people if they become isolated and should remain a focus of concern.

Budge, C., Stephens, C., & Stichbury, C. (2014). *Health*. Summary report for the New Zealand Longitudinal Study of Ageing. Palmerston North: Massey University.

#### **CAREGIVING**

The number of caregivers has increased in New Zealand in line with the ageing population, with around 480,000 individuals in New Zealand providing care for someone who is ill or disabled. A significant proportion of the NZLSA sample were either currently providing care (9.2%), had done so in the past 12 months (3.2%) or more than 12 months prior to survey (13.7%). Frailty in old age was the most common condition reported for care recipients with nearly 40% of caregivers citing this condition. Carers

reported poorer mental health than non-carers (when controlling for important demographic variables), but there was no significant difference between the two groups on physical health. However, burden of care was related to physical health with those providing more hours of care on more occasions reporting the poorest health. Although 54.8% of carers were in some form of paid employment, carers were less likely to be in paid employment



than non-carers and more likely to be out of the paid workforce for reasons other than retirement (e.g. unable to work due to health or disability issue, full-time homemaker). Looking at changes in health status over the two year timeframe, the group who had stopped caregiving by 2012 were more likely to report change in health status (either decline or improve) than no change compared to other participants. This suggests that this group may include those who have relinquished the caregiving role due to their own failing health along with those whose care recipient no longer requires care (i.e. recipient died, was institutionalised or their condition improved).

Alpass, F. M., Stephens, C. V., & Stevenson, B. (November, 2013). Transitions in and out of caregiving: Impacts on health and wealth. In Optimal Ageing through Research, Program Book (p.176), the 66th Annual Scientific Meeting of the Gerontological Society of America, 20-24 November 2013, New Orleans, Louisiana. USA: Gerontological Society of America.

Alpass, F., Keeling, S., & Pond, R. (2014). Caregiving. Summary report for the New Zealand Longitudinal

#### SOCIAL SUPPORT & NETWORKS

The majority of the NZLSA participants reported reasonably high levels of social support, but they did so from within a wide variety of social network types. Those in relatively extensive social networks were more likely to report better health and quality of life. In contrast, those in Private and Family Dependent networks (approximately 20% of the sample) were more likely to report poorer mental health, quality of life and amount of social support they could provide and receive. They were also significantly more likely to have felt lonely and discriminated against compared to those who had more exten-

sive networks comprising friends, neighbours and their wider community.

These findings reinforce international understandings of the importance of social support to health, and point to possible sites for intervention to improve opportunities for engagement in supportive social networks and to reduce loneliness. There were substantive differences in social integration that could be attributed do differing socioeconomic background—particularly economic living stand-



ards. Socioeconomic disadvantage was more evident in Family Dependent and Private social networks and was associated with lower levels of social support, feelings of lone-liness and greater discrimination. These findings suggest that economic disadvantage is an important barrier to social integration and the resultant health benefits.

Noone, J., & Stephens, C. (2014). *Social integration, health and quality of life.* Summary report for the New Zealand Longitudinal Study of Ageing. Palmerston North: Massey University.

Stephens, C., Noone, J., & Alpass, F. (2014). Upstream & downstream correlates of older people's engagement in social networks: What are their effects on health over time? *International Journal of Ageing & Human Development*, 78(3), 151-172.

#### WORK AND RETIREMENT

Approximately 55% of NZLSA's participants were in either part- or full-time paid employment and 36% had retired. This left just under 10% who were not in paid work, but have not yet reached retirement age or haven't classified themselves as retired. The majority of these people have been injured and cannot work or are currently unem-



ployed but looking for work. This was a group over-represented by Māori. Being in paid employment was associated with better physical health, but workers and retirees shared the similar levels of mental health. Older workers appeared the happiest at work, as did those with better health.

Workers' financial expectations of retirement tell a different story. Most were pessimistic about their projected financial status in retirement, and this was particularly apparent for the younger workers. Women and Māori also reported poorer financial expectations as did those with low job satisfaction and negative perceptions of their rewards at work. Those with poor health also reported the most pessimistic views of their future finances, possibly because they feel they that may not be able to work long enough to generate sufficient retirement wealth. Over half of the sample expects to retire in the next eight years, reflecting a large decrease in levels of economic activities in New Zealand more generally. Age was by far the biggest predictor of retirement. When looking at actual retirement behavior from 2010 to 2012, age was again the strongest predictor of transition from worker to retiree. Those dissatisfied with work in 2010 were also more likely to retire in 2012 compared to satisfied workers. Finally, those with pessimistic financial expectations were also more likely to stay in paid employment. The strong relationship between poor physical health and lower workforce participation, suggest that the promotion of workers' health is a vitally important step towards promoting economic activity in older workers. Finally, New Zealand Superannuation has been widely regarded for its simplicity and effectiveness as an anti-poverty measure in older adults. Our findings also suggest that it also plays an important role in shaping work and retirement behaviour. Reaching age 65 was by far the most common reason for retirement and age was the strongest predictor of retirement expectations and retirement behaviour.



Alpass, F., & Stephens, C. (2012). NZLSA: Workforce participation and wellbeing in older New Zealanders. Paper presented at *New Zealand Association of Gerontology Ageing and Diversity Conferences 2012*, 13-15 September, Waipuna Hotel and Conferences Centre, Auckland. In New Zealand Association of Gerontology: Ageing and Diversity Conference 2012: Conference Handbook (pp. 83). New Zealand: New Zealand Association of Gerontology.

Noone, J., & Alpass, F. (2014). *Work and retirement*. Summary report for the New Zealand Longitudinal Study of Ageing. Palmerston North: Massey University.



#### INCOME, ASSETS, POVERTY AND HOUSING TENURE

This paper explores the income, asset accumulation, poverty, housing tenure and wellbeing data in the first two waves of the New Zealand Longitudinal Study of Ageing (NZLSA). Those on lower incomes, with fewer assets and renting accommodation scored low-

er on wellbeing and quality of life scales than those on higher incomes with greater asset accumulation and who lived in their own homes. Interestingly, asset accumulation demonstrated a stronger relationship with wellbeing than income, though both were significant. The relative poverty measures at 50% and 60% of median disposable household income for those 65 years and over showed a decline in 2012 from the 2010 figures. However ,when housing costs were taken into account the poverty count increased over the same period. The findings suggest policies that contribute to or promote saving will contribute to greater wellbeing in later life. Encouraging citizens, including low income people, to plan for the future, even in a small way, can enhance wellbeing. Likewise an adequate income and affordable homeownership contribute to positive wellbeing. Deficits in any of these three areas are significantly associated with lower levels of wellbeing.

Waldegrave, C. (2013) Income, Assets, Poverty and Housing Tenure in the First Two Waves of NZLSA. Presented at *IAGG World Congress of Gerontology and Geriatrics*. Seoul, Korea.

Waldegrave, C. (2014). *Income, assets, poverty and housing tenure*. Summary report for the New Zealand Longitudinal Study of Ageing. Wellington: Family Centre Social Policy Research Unit.

**AUCKLANDERS 50 AND OVER** (we acknowledge the Auckland Council, Research, Investigations and Monitoring Unit who commissioned the paper).

The majority of the sample of older people from Auckland were satisfied with their lives, health and living standards, and engaged with their families and communities. However respondents were increasingly facing a future with less housing and income security. Many worried about their personal security; over half of the sample was lonely; depression was a factor for a significant minority; and too many experienced everyday discrimination because of their age. Many older Aucklanders are active, involved and independent. Around a third of those between 65 and 74 were in full-time or part-time work. The majority engage in moderate physical activity and on average they belong to 2 - 3 clubs or organisations. A significant minority experience difficulties getting to places like shops, leisure activities and medical centres. In addition, a substantive minority reported abuse, and smoking rates, though low, were not insignificant. Nearly half can be classified as hazardous drinkers.

Waldegrave, C, King, P. and Rowe, E (2012) Aucklanders 50 and over: A health, social, economic and demographic summary analysis of the life experiences of older Aucklanders, Auckland Council: Auckland.

#### ALCOHOL

Of considerable interest to the NZLSA researchers has been hazardous and binge drinking among older New Zealanders. We found consistently high levels of harmful drinking for older New Zealanders, with differences between males and females, and Māori and non-Māori. Some of the most recent research suggests that better economic living standards explain the relationship between high levels of hazardous drinking and better ...cont.

physical health, rather than the hypothesised 'beneficial' effects of moderate drinking. Looking in more detail at alcohol consumption for Māori, there are indications that such things as social networks, smoking and Māori cultural identification are related to hazardous and binge drinking alcohol use. Sarah Herbert will be going on to look in more detail at the socio-cultural context alcohol use is embedded in. Dr Andy Towers has been awarded a Massey University Research Fund grant for a collaboration with researchers at UCLA (USA) and Peninsula Health (Australia) to compare rates of hazardous drinking in older adults across these three countries using a new hazardous alcohol use screen, the Alcohol-Related Problem Survey (ARPS). Findings will be reported later in 2014.

Towers, A., Stephens, C., Dulin, P., Kostick, M., Noone, J., & Alpass, F. (2011). Estimating Older Hazardous and Binge Drinking Prevalence Using AUDIT-C and AUDIT-3 Thresholds Specific to Older Adults. *Drug and Alcohol Dependence*, 117, (2–3), 211–218.

Philipp, M. & Towers, A. (2013). Exploring the degree of alcohol consumption in the presence of chronic ill health and medication use in older New Zealanders. Presented at *APSAD 2013*, Brisbane AUSTRALIA

# POSTGRADUATE AGEING RESEARCH FROM NZLSA Doctoral

- "Alcohol use among older Māori: A cause for concern?" (Sarah Herbert)
- "The experiences of older Chinese immigrants". (Siu Chun Tse)
- "Cognitive functioning in community-dwelling older new Zealanders". (Lauren Callow)
- "Doing good and feeling well: Investigating the relationship between volunteering and the risk of depression among older adults". (Louise Cooper)
- "Resource gains and losses, mental health and ageing". (Rachel Hooks)
- "The effects of social isolation on cognitive performance in older adults". (Catherine Whitehouse)

#### Masters

- "Cancer survivors return to work and wellbeing". (Sarah Beale)
- "The health effects of involuntary retirement on older New Zealanders". (Nancey Crooks)
- "The relationship between medication use and health behaviours in older people with coronary hear disease". (Zanisha Ramjee)
- "Social support, retirement, and health: A longitudinal study". (Claire Rayner)
- "Religiosity and quality of life outcomes in older people who have had a diagnosis of cancer". (Bridget Cleaver)
- "The Effects of Social Isolation on Cognition: Social Loneliness Reduces Cognitive Performance in Older Adults." (Catherine Whitehouse)
- "The Holy Trinity: Religion, well-being, and purpose in life". (Ged Montgomery)

#### Honours

"Quality of life among breast cancer survivors". (Rachael Glassey)

#### CONTACT US

You can read more about our ongoing research projects by visiting our websites: http://www.massey.ac.nz/hart/ and http://www.familycentre.org.nz/
You can contact us here: Phone - 0800 100-134 (free-phone) or hart@massey.ac.nz
We would be happy to discuss these findings with you further.