

**Retirement Pathways, Mental Wellbeing and Suicidal
Behaviour in Older Rural Australians: A qualitative study**

Kylie Crnek-Georgeson

A thesis submitted in fulfilment of the requirements of the degree

Doctor of Philosophy

Faculty of Medicine and Health

University of Sydney

6th August 2020

Declaration of Originality

I certify that this thesis and the research reported in it are original. It contains no material that has been submitted for the award of any degree in any other university, and that to the best of my knowledge and belief, this thesis contains no copy or paraphrasing of material previously published or written by another person, except where due reference is made in the text of this thesis.

Signed

Kylie Crnek-Georgeson

Date: 6th August 2020

Acknowledgements

To be writing my final paragraph in my thesis is certainly a very proud moment for me. I have not done this alone. There are so many people to thank, but, most of all, my family and beautiful friends who have encouraged me and supported me in my ‘trip of a life time’. Without your support, guidance, faith, patience, and encouragement, I would not be here writing this.

I have had the support of many people in both a professional and personal capacity, but, there is one person who deserves a very special acknowledgement. I would very much like to acknowledge Dr Leigh Wilson who has been my secondary supervisor from 2015 – 2018 at Western Sydney University, and then my primary supervisor from 2018 – 2020 at Sydney University. You have supported and guided me from the first time we ever met. Your encouragement and guidance have helped me to persevere and believe that this was in fact, a possibility. Thank you for your kindness of spirit, time and wealth of knowledge-you are the best teacher I have ever had.

I would also like to thank Professor Andrew Page who was my primary Supervisor at Western Sydney University from 2015 - 2018. Your support, patience and guidance throughout this thesis, has driven me to be better than I ever thought was possible. I would also like to make special mention of Dr Rachelle Arkles who was an Adjunct Supervisor throughout the course of this study and Dr Kate O’Loughlin who was my secondary supervisor at Sydney University from 2018 – 2020 as well as Dr Lee Fay-Low, Associate Professor Martin Mackey, Dr Nicole Peel and Dr Nerida Klupp. You have all made this journey a wonderful experience, and I am truly grateful to have you in my life.

Thank you to my wonderful husband Michael who has supported me through ‘Our PhD’ journey. I could not have done this without your help- I look forward to being able to support you on your next journey. To my mother, Helen. You are an

inspirational woman, who has supported me in this journey in so many ways and I will be forever grateful. To my father, Geoff, thank you for your interest and praise throughout my journey. As always, you are there to listen to me and encourage me with my journeys and interests. To my sister Alyse and to my brother Jamie, you are two of the most amazing human beings I know. I am proud to call you my siblings. Unconditional positive regard.

To my children, Lily, Elizabeth and Rose, and to my granddaughter, Isla, I write this to say thank you for your inspiration and the joy that you bring into my life. It has helped me to stay grounded throughout this process, released me from stress and shown me what life is about. Pure joy. I am truly blessed.

Dedication

I dedicate this thesis to two very special people, who, over the course of writing this thesis, lost their fight in this life. One of my very best friends, Francis Kuyper, who lost his life to suicide. Francis, you have left a very large hole in my heart. To my mother in law, Wendy Georgeson who lost her battle with her health only a few short months ago. Wendy, you were one of the kindest women I have ever known and the most generous grandmother to our beautiful Rose. Thank you for sharing your son with me. Lastly, to my Tony, thank you for always believing in me. You are truly my giant angel in heaven (R.I.P. Stephen Anthony Crnek 11/11/1963-25/8/2005). May you all rest in peace and may we find a way to support all who are living in darkness.

Contents

Retirement Pathways, Mental Wellbeing and Suicidal Behaviour in Older Rural Australians: A qualitative study	1
Declaration of Originality	1
Acknowledgements	2
Publications	9
Papers submitted for publication	9
Conference presentations	10
List of figures.....	12
List of tables.....	13
Chapter 1: Introduction.....	14
1.1 Overview	14
1.2 Objectives of this research.....	16
1.3 Thesis structure.....	17
Chapter 2: Retirement and Mental Wellbeing	19
2.1 An ageing population.....	19
2.2 Retirement in Australia.....	21
2.3 The impact of retirement in rural Australia	23
2.4 The current national mental health reform agenda	24
2.5 Ageing and Suicide – The global context.....	25
2.6 Suicide in older Australians.....	26
2.7 Rurality and suicide	27
Chapter 3: Methods.....	32
3.1 Introduction	32
3.2 Study Aims	32
3.3 Study setting	33
3.4 Study participants	33
3.5 Study method.....	34

Chapter 4: Retirement Pathways: A Review of the International

Literature.....	39
4.1 About this paper.....	39
4.2 Introduction	40
4.3 Method.....	42
4.4 Results and analysis.....	43

Chapter 5: Factors influencing suicide in older rural males: A

review of Australian studies	63
5.1 About this paper.....	63
5.2 Introduction	64
5.3 Method.....	65
5.4 Results and analysis.....	66
5.5 Literature review.....	67
5.6 Discussion.....	72
5.7 Conclusions	75

Chapter 6: Navigating the feelings of retirement

6.1 About this paper.....	76
6.2 Introduction	77
6.3 Methods	79
6.4 Results	80
6.5 Discussion.....	95
6.6 Conclusion.....	98

Chapter 7: Ageing and Retiring in Rural Australia:

Perspectives of key stakeholders.....	100
7.1 About this paper.....	100
7.2 Introduction	101
7.3 Methods	102
7.4 Results	103

7.6	Discussion.....	113
7.7	Conclusion	116
Chapter 8: Discussion and conclusions.....		118
8.1	Introduction	118
8.2	Discussion.....	118
8.3	Strengths and limitations	121
8.4	Conclusions	124
Chapter 9: Recommendations		126
References.....		130
List of Appendices.....		155

Abstract

Introduction

This research aims to provide an evidence base on the transition to retirement, and its impact on the mental and physical wellbeing of individuals and family members, and health services, with a focus on suicidal behaviours in older rural Australians.

Method.

This study used a phenomenological approach to investigate the lived experiences of retirement transition and its impact on health, wellbeing and suicidal ideation in two groups in the rural population in New South Wales Australia: rural residents and rural stakeholders. The study was approved by the Human Research Ethics Committee of Western Sydney University (Protocol Number [H12022]). Participants were recruited using flyers, advertisements, radio interviews, stakeholder networks in rural communities, and suicide prevention and support services.

Results

Findings suggest that the transition from paid work into retirement leads to expectations and feelings that are difficult to predict or comprehend. The participants' experienced social isolation, decreasing physical and psychological health, loss of identity, 'place' in society and feelings of disconnectedness. Conversely, rural stakeholders commented on a deterioration of resilience in rural residents (particularly because of ongoing drought) but supported the feelings of isolation, loss of place and loss of identity in those forced to retire. This study highlights a 'disconnect' between the perception of resilience in rural residents and stakeholder observations of residents' resilience. The research also highlights the implications of drought and environmental factors on the health status of rural people and their ability to plan for retirement and future activities.

Conclusions

With these traits commonly linked to suicidal behaviour, it is important to highlight the impact that retirement has on individuals. This suggests a need to; increase the profile and provision of health promotion programs, educate health professionals on issues facing older rural Australians, monitor levels of resilience in relation to physical and psychological deterioration (pre-and post-retirement) and continue health promotion programs that increase awareness of the effects of living in long term drought conditions and improve the level of health literacy in rural residents.

Publications

1. Crnek-Georgeson, K., Wilson, L.A. & Page, A. (2017) Factors influencing suicide in older rural males: a review of Australian studies. *Rural and Remote Health*, 17:4020. <https://doi.org/10.22605/RRH4020>. This publication is presented in this thesis as Chapter 4.

Papers submitted for publication

2. Crnek-Georgeson, K., & Wilson, L.A. (2020). Retirement pathways. A Review of the International Literature. Submitted to *Work, Ageing and Retirement*. This paper is presented in this thesis as Chapter 3.
3. Crnek-Georgeson, K., Wilson, L. A. (2019). Navigating the feelings of retirement in rural Australia. Submitted to *Rural and Remote Health* (Under Review). This paper is presented in this thesis as Chapter 6.
4. Crnek-Georgeson, K., Wilson, L.A. (2019). Retiring in Rural Australia: Perspectives of key stakeholders. Submitted to *Rural and Remote Health* (Under Review). This paper is presented as Chapter 7.

Conference presentations

1. **Australian Association of Gerontology – National Conference, Alice Springs- November 2015.**

Poster presented at the national AAG conference in Alice Springs, 2015.

“Older male depression leading to suicide. Is it just that?”.

<https://www.aag.asn.au/documents/item/886>

2. **International Association of Suicide Prevention Asia-Pacific, New Zealand, May 2018.**

Oral paper delivered – International Association for Suicide Prevention- Asia Pacific – Waitangi, New Zealand, 2018.

“Retirement pathways and suicide risk – navigating the feeling of retirement”

<https://iasp.info/newzealand/>

3. **International Summit on Suicide Research – Miami, USA, October 2019.**

Oral paper delivered as part of the Symposium “Suicide in Older Adults:

Identifying Risk Group and Testing Dedicated Interventions”.

“Retirement pathways and suicidal behaviour in older rural dwelling adults”.

<https://iasr.societyconference.com/v2/>

4. **52nd Australian Association of Gerontology Conference – Sydney, Australia, November 2019.**

Oral paper delivered “Voices of older Australian rural resident’s stakeholder perspective”.

<https://www.aag.asn.au/>

Abbreviations

AAG	Australian Association of Gerontology
ABS	Australian Bureau of Statistics
ACI	Agency for Clinical Innovation
AIHW	Australian Institute for Health and Welfare
AFSP	American Foundation for Suicide Prevention
ARRIA	Aegon Retirement Readiness Index Survey
BOM	(Australian) Bureau of Meteorology
CEPAR	Centre of Excellence in Population Ageing Research
COTA	Council on the Ageing
DAWR	Department of Agriculture, Water and the Environment
DOD	Department of Defence
DOH	Department of Health
DPI	Department of Primary Industry
DVA	Department of Veterans Affairs
ILO	International Labour Organisation
NFF	National Farmers' Federation
NMHC	National Mental Health Commission
NRHA	National Rural Health Alliance
NSW	New South Wales, Australia
OECD	Organisation for Economic Co-operation and Development
RBA	Reserve Bank of Australia
RFDS	Royal Flying Doctor Service
SARRAH	Services for Australian Rural and Remote Allied Health
SPRF	Suicide Prevention Research Fund
TTR	Transition to Retirement
UN	United Nations
USA	United States of America
WHO	World Health Organisation

List of figures

- Figure 1: NSW State Seasonal Update, June 2018.
- Figure 2: Age Specific death rates for intentional self-harm, by sex 2016(a).
- Figure 3: Rainfall deficiencies in Australia.
- Figure 4: Remoteness Areas of Australia.
- Figure 5: Literature search strategy.
- Figure 6: Literature search strategy.
- Figure 7: Relationship between themes identified by participants.
- Figure 8: Relationship between themes identified by rural stakeholders.

List of tables

Table 1:	Literature included in Review.
Table 2:	Literature included in Review.
Table 3:	List of demographics of Rural Participants

Chapter 1: Introduction

1.1 Overview

In her 1974 book *Questions and Answers on Death and Dying*, Elisabeth Kubler-Ross stated that forced retirement from the workforce may cause deterioration in a person's physical and mental health (Kubler-Ross, 1974, p.150). In Australia, from 1910 - 2014, the retirement age at which a person could access retirement benefits was 65 years for males and 60 years for females (Parliament of Australia, 2014; ABS, 1998; Neilson, 2010). However, in 2014, the Australian Government changed the legislation pertaining to the access of retirement benefits (Parliament of Australia, 2014; Klapdor, 2014). With the introduction of the new policy, the age at which a person can now access aged care retirement benefits will rise incrementally to the age of 70 by the year 2035 (Parliament of Australia, 2014). This new legislation has the potential to place those who are forced to retire through illness, injury or redundancy before the required age, at a significant disadvantage in terms of lower average weekly income; decreased capacity to work; a reduction in the ability to contribute to superannuation; and an increased reliance on the public health and welfare services (Schofield, Shrestha, Percival, Passey, Kelly, & Callander, 2011).

According to the Australian Bureau of Statistics (ABS) study on Retirement and Retirement Intentions (completed in 2014 – 2015), 19% of males and 14% of females retired early due to ill health (ABS, 2016). In 2017, the ABS released the latest figures for 2016, highlighting an increase in the number of males retiring due to ill health, from 19% to 21%. Of note, this number decreased from 14% to 12% in females (ABS, 2017). It is reasonable to assume that older women experience the negative effects of these new retirement benefit reforms, because of needing to work longer to access their retirement benefit and enjoy a longer more sustainable retirement.

There is evidence to suggest that forced retirement can lead to poor mental health and increased risk of suicide (Sheppard & Wallace, 2018; Byles, Vo, Forder, Thomas, Banks, Rodgers & Bauman., 2016; Myles, Large, Myles, Adams, Liu & Galletly, 2017).

Previous studies in Australia have investigated risk factors and patterns of suicide in older age-cohorts, and by geographic area (Qi, Hu, Page & Tong, 2014). There is limited research however into the context of differential age and area specific suicide and the impact of forced early retirement, (either through illness or injury), on suicidal behaviour in older Australians. Further research in this area will provide an evidence base on the transition to retirement, for individuals, family members and health services.

Using a qualitative approach, this research investigated the impact of retirement pathways on mental wellbeing and suicidal behaviour in older (aged >45 years) rural Australians, focusing on forced early retirement (through injury, illness or redundancy). For this study, a retirement pathway will be defined using Boissonneault & de Beer's (2018) dimensions of the retirement process – the age when the person stopped formally working and exited the paid workforce. During the retirement transition, the concept of timing was included with relevance to a gradual or full retirement.

The study was conducted in three phases. The initial phase consisted of two literature reviews. The first was a review of the literature pertaining to retirement pathways for both males and females. The second review focussed only on male suicide due to the lack of peer reviewed literature available on female older workers. The second phase of this study was the collection of data from rural participants to elucidate the phenomenon of retiring in rural Australia. The third phase was collection of qualitative data from rural stakeholders. These phases link together to provide a detailed qualitative assessment of the role of employment status and other antecedents to mental wellbeing and suicidal behaviour in older rural adults, establishing the role forced retirement plays in rural contexts. This study will inform suicide prevention policies and provide strategies for follow-up support for families and communities.

During this research study, New South Wales experienced one of the worst droughts in recorded history, with 99% of the state declared a drought zone (Department of Primary Industries (DPI), 2018). Using the Combined Drought Indicator, regions across New South Wales experienced intense drought conditions for a period longer than 12 months. Figure 1 shows that most of the state experienced either 'Intense Drought', or 'Drought', with the remainder of the state declared as 'Drought Affected' (DPI, 2018). The impact of the drought on this research study will be discussed further in Chapter 8.

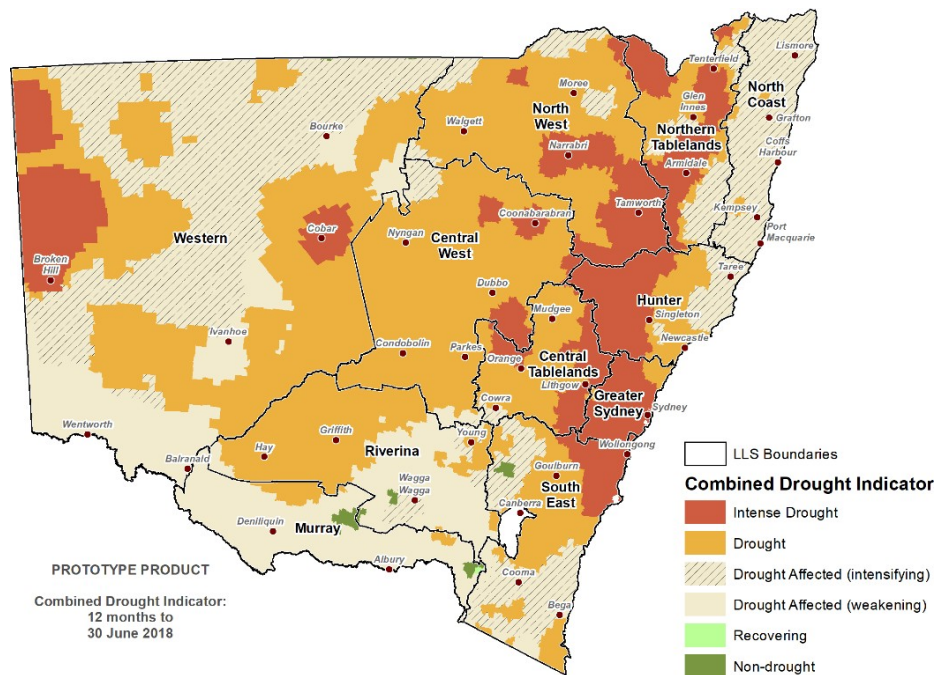


Figure 1: NSW State Seasonal Update, June 2018 (Source: www.dpi.nsw.gov.au)

1.2 Objectives of this research

The principal objectives of this research are to:

1. Investigate the association between retirement pathways and mental wellbeing and suicidal behaviour in older age rural Australians, residing in New South Wales;
2. To explore risk factors and investigate possible protective factors between retirement pathways, employment transitions, mental wellbeing and suicidal behaviour, and
3. Provide context specific recommendations to inform suicide prevention policies and programs in older Australians in a rural context.

1.3 Thesis structure

This thesis is comprised of nine chapters.

Chapter one: *Introduction* (this chapter) presents an introduction and overview of the research topic and the research undertaken. It describes the objectives of this research and outlines the format of this thesis by publication.

Chapter two: *Retirement and mental wellbeing: context and setting* provides background and context of the inter-connectedness between transition to retirement and mental wellbeing.

Chapter three: *Methods* is a chapter outlining the methods used in this qualitative study and describe the underpinning theories used to inform research method, data collection and analysis, including the exploration of risk factors along with any possible protective factors between retirement pathways, employment transitions, mental wellbeing and suicidal behaviour.

Chapter four: *Retirement Pathways: A review of the international literature*

This paper reviewed the published literature of retirement pathways of older people across the globe, investigating patterns of retirement, focussing on current retirement patterns, transition, incidences of redundancy, and traditional and contemporary pathways.

Chapter five: *Factors influencing suicide in older rural males: a review of Australian*

studies is a literature review that has been published in the Journal of Rural and Remote Health (2017). The literature review examines Australian studies investigating the factors that influence rural males to take their life by suicide. This chapter informs chapters five, six and seven.

Chapter six: *Navigating the feelings of retirement in rural Australia-* This chapter analyses the results of the first phase of a phenomenological study, with 18 rural participants in New South Wales, Australia.

Chapter seven: *Ageing and Retiring in rural Australia: Perspectives of key*

stakeholders- This chapter analysed the results of the second phase of the study, investigating key issues of ageing and retirement experienced by rural residents, from a stakeholder perspective.

Chapter eight: *Discussion chapter* presents a cohesive summation of the two literature reviews and the larger study.

Chapter nine: *Recommendations:* This chapter reports on five specific recommendations that have arisen out of this research study that will help to inform suicide prevention policies, and global retirement policies.

For consistency, all figures and tables in this thesis are numbered sequentially as Chapters Four, Five, Six and Seven are separate publications. References have been listed in a separate section of the thesis, rather than at the end of each chapter.

Where papers have been published by peer reviewed journals they are included in published format in the appendices section. Following the Australasian Journal on Ageing guidelines, the term ‘elderly’ was only used as a search term in the Literature Review. It is not used in this thesis, instead the terms ‘aged’ or ‘older people’ are used.

Chapter 2: Retirement and Mental Wellbeing

2.1 An ageing population

This chapter is written with the acknowledgement that retirement and ageing have a very high correlation. The global population is living longer than any previous generation because of improved sanitary conditions, high quality diet and improved medical technologies (World Health Organisation, WHO, 2013). It is estimated that by the year 2020, there will be more people over the age of 60 than there are children under 5 years of age, and by 2050, the number of people living over 60 years of age will have increased by 200%. Due to advanced technology leading to increased general health, older people are living longer than historically recorded (Phillips & O'Loughlin, 2017). With this exponential growth, it is important to note that 80% of older people will be living in lower to middle income countries (WHO, 2018).

Older people are at a significantly higher risk of suicide due to feelings of loneliness and a decreased sense of belonging (Eades, Segal and Coolidge, 2019). Loneliness is defined as “a feeling of distress when social relations are not the way they would like” (Abbott, Lim, Eyres, Long, Matthews, 2018, p.2), coupled with the realisation of their own mortality, increased physical and/or psychological illness, the death of friends and/ or spouses, and a reduction of continuous income (Vo, Forder, Tavener, Rodgers, Banks, Bauman & Byles, 2014). Research conducted by Joiner (2005) focused on the ‘Interpersonal Psychological Theory of Suicide’, where a person is at higher risk of dying by suicide if they are experiencing feelings of Perceived Burdensomeness (PB) and Thwarted Belongingness (TB). Perceived burdensomeness can be clarified by feelings of being a burden to others resulting in a devaluing of self. Thwarted belongingness is defined as a feeling of not belonging to family or community (Joiner, 2005). Given the increase in the ageing global population, changing retirement patterns and increased longevity, Joiners’ theory needs to be given full consideration (2005).

In Australia, the population of people aged over 65 years is increasing in line with global trends; with citizens from Australia and New Zealand experiencing the highest life expectancy at birth in the world (83.2 years). (United Nations, (UN) 2019).

The Australian population rate is expected to increase substantially due to the Post War “Baby Boom Generation” (those born between 1945 and 1964) reaching 65 years of age (Mc Donald, 2017). In 2017, the population of Australians aged over 65 years makes up approximately 15% of the total population (3.8 million), compared to 1927, when the percentage of people over the age of 65 was only five percent (Australian Institute of Health and Welfare (AIHW), 2017). Although life expectancy has increased, there are some risk factors (such as smoking, alcohol consumption, reduced physical activity and low vegetable consumption) that are concerning and that are affecting the health of this generation (Humpel, O’Loughlin, Wells & Kendig, 2010). As life expectancy increases, the amount of people living with long term disability is increasing also, for example, a person living with Down Syndrome can expect to live over the age of 60 years and can now look forward to retirement. The preparation for retirement is a very important part of the normal pathway to retirement (Stancliffe, Wilson, Gambin, Bigby & Balandin, 2013).

Aboriginal and Torres Strait Islander people make up three percent of the population, with 23% of these over 50 years of age (139,000). Life expectancy for people from Indigenous communities of Australia is much lower than those who are non-Indigenous, and just over half of this community are female. This is reflected in research conducted with non-Indigenous people, demonstrating that females in Australia have a longer life expectancy than males (ABS, 2017).

Previous Australian research reviewed published literature on forced unemployment, suggesting a strong correlation between unemployment and deterioration of good mental health (Myles et al., 2017). Globalisation and unemployment in the industrial sector, suggests the need to pay attention to links between physical deterioration and psychological distress, particularly in older rural men (Byles et al., 2016). No previous studies in the Australian context have considered employment transitions in older age groups in relation to suicidal behaviour, particularly in the context of rural populations, where additional mental health stressors may be evident. Co-location of work and home, lack of definition of an acceptable retirement age, difficulties with property valuation and fluctuation of the real estate market are

embedded in the cultural and historical vision of the traditional Australian farm (Rogers, Barr, Callaghan, Brumby & Warburton, 2013).

In the context of an ageing, Australian population, the literature on retirement, wellbeing and suicide in Australia was reviewed and is presented in this chapter as a narrative analysis. These methods are described in Chapter 3.

2.2 Retirement in Australia

Prior to 1908, Australians aged over 65 were ineligible to receive retirement benefits from the Australian government. In 1908, the government passed the *Invalid and Old Aged Pensions Act 1908*, allowing older males and females to access the aged pension at 65 years (Australian Government, 2018). In 1992, compulsory superannuation payments by employers, designed to increase the retirement income of the Australian people, were introduced to manage the increasingly ageing “Baby Boomer” population. In 1994 an equalisation process was introduced, with an amendment to the Social Security Legislation, meaning the age at which women could access the aged pension would be gradually increased to 65 years of age (Nielson, 2010). In 1998, Rice highlighted the three pillars of retirement; The Aged Pension, Superannuation and Savings, reviewing in detail the ‘unstable pillar’ of the Aged Pension (Rice, 1998). The outcomes of this review focused on four key factors:

- 1) Monitoring the ageing population;
- 2) Preparing a safety net for those who may experience financial difficulty in retirement;
- 3) Reviewing a means test for the pension and
- 4) Focusing on appropriate accommodation and aged care needs for the people of Australia.

Approximately six years later the then treasurer of Australia stated that “*there will be no such thing as full-time retirement*” (Costello, 2004), reinforcing the direction of the Australian government’s policy on the ageing population.

In the 1990’s, Australian women experienced lower financial security upon retirement, compared to their male counterparts (Olsberg, 2005), because of the

Compulsory Superannuation policy/guarantee. This policy was designed to link directly to an individual's occupation (Australian Government, 1992). Many women were not eligible for the superannuation guarantee, as they were working in the home, raising children and/or volunteering in their communities and not working in a paid capacity. Although changes in the Family Law Act, introduced spousal benefits and additional co-contribution payments for low income earners, many women still experienced financial hardship upon retirement (Olsberg, 2005). On average, women retiring in 2019, have half of the superannuation savings of men (Council on the Ageing, (COTA), 2019). Reviewing his original document 20 years on, Rice stated that *"many of the issues mentioned twenty years ago, are still present well into the 21st Century"* (Rice, 2018) Rice's recommendation of a 'Safety Net' for those experiencing financial difficulty in retirement has not been addressed by the Australian government. COTA (2019) reported in their State of The Older Nation Report, that women have greater financial insecurity, less money to spend on leisure and social activities and are less likely to have private health insurance (COTA, 2019).

In 2014, the Australian Government changed the legislation pertaining to the access of retirement benefits. With the introduction of the new legislation, and further building on the equalisation process that commenced in 1994, the age that men and women can access retirement benefits, will rise incrementally to the age of 70 by the year 2035 (Parliament of Australia, 2014). Given this delayed access to pension funds, this legislation has the potential to place those who are forced to retire through illness, injury or redundancy, at a significant disadvantage in terms of lower average weekly income; decreased capacity to work; a reduction in the ability to contribute to superannuation; and an increased reliance on the public health and welfare services (Schofield et.al., 2011).

It is reasonable to assume that older men and women experience negative effects of these new retirement benefit reforms, including possible deterioration of physical and psychological health, needing to work longer to be able to afford to retire and access retirement benefits. Changes to retirement policies and the stressors associated with these challenges have the potential to lead to poorer mental and physical health and an increase in adverse mental health outcomes, including suicide (Goodwin & O'Connor, 2014;

Johnson, 2008). Although, it is important to emphasise the protective factors associated with living in a rural area, such as sense of community, understanding of living and working in a rural area (Guiney, 2012) it is also of importance to acknowledge the risks for older working and retiring adults (Shah, Zarate-Escudero, Bhat, De Leo, & Erlangsen, 2014) in rural areas (Kunde et.al., 2018).

2.3 The impact of retirement in rural Australia

People living in rural and remote areas experience poorer health outcomes. This is due to greater distance from medical services; poorer access to education; limited opportunities for ongoing employment; and greater exposure to occupational risk, because of farming or mining work conducted in rural areas (The Rural and Remote Health Web Report, Australian Government, 2017). Research conducted by Alston (2012) reinforced that older rural Australians are at significant risk of suicide, due to feelings of disconnectedness and isolation from their local community (Alston, 2012), although, there are significant protective factors to living in a rural area, it is important to note the level of disassociation when a person leaves the workforce or is unable to work on their land. Although half of Australia's land is used for agriculture (ABS, 2017), of the 7 million people residing in rural Australia (AIHW, 2018a), only 318,600 people were employed in the combined industries of agriculture, forestry and fisheries (2.5% of the total workforce) (NFF, 2020) and working in these industries requires physical fitness that does deteriorate as one ages (Council on the Ageing, 2018).

Coupled with a level of perceived burdensomeness towards their spouses and/or children (Joiner, 2005) transgenerational issues; a lack of understanding of a new identity in retirement; a changing global climate and the impact of gender difference on the understanding of ageing in rural Australia can lead to an increased risk of suicidal behaviour (Alston, 2012). Kendig's research highlights the importance of understanding gender differences in retirement (Kendig, 2017). For men, retirement is viewed as a way of continuing with commitments from a physical perspective, while women view retirement as a way of continuing to stay connected with friends and family (Kendig, 2017). With this perspective in mind, there needs to be a delineation between how men and women view retirement. This has been discussed in greater detail in Chapter 4.

2.4 The current national mental health reform agenda

In 2015, the Australian Government announced a review of major mental health reforms (National Mental Health Commission, (NMHC, 2016). The Council on the Ageing (COTA), welcomed the proposed changes but highlighted the need for further increases to mental health services for older Australians.

“The reality is that the mental health needs of older people are frequently not given priority, or are indeed ignored, often being incorrectly discounted of as just a normal part of getting old. According to ABS data, in 2013 men aged 85 and over had the highest rate of suicide of any age group in Australia. While we rightly focus on addressing the incidence of suicide in young people, we should equally look at solutions to bring down the rates in the older population” (Yates, 2015).

The National Mental Health Commission report highlights the need for investigation into the phenomenon of the “missing middle”, a term that refers to the gap in services between acute mental health care and the primary health care sector (NMHC, 2016). This lack (or perceived lack) of community-based services is likely to be more prominent in rural areas, where acute and primary care services are often less accessible. Rural dwelling individuals can be exposed to harsher living conditions, geographic isolation, poorer mental or physical health, and have less favorable health outcomes than their urban counterparts (AIHW, 2018a), with the Royal Flying Doctor Service (RFDS) stating that rural and remote areas of Australia are in a state of crisis and some areas do not have access to a Psychologist (Ahman, Connellan, Diamond, & Lavery, 2018).

Whilst the Commonwealth government has provided more funding to place mental health services in mainstream health settings, state governments have reduced community and customised support services, leaving a gap in service provision (Australian Government, NMHC, 2016). Much of this gap is seen in rural Australian communities where access to services for mental health is limited (Research Australia, 2018). Additionally, neighbors may not be in walking distance, and universal predictors of depression, such as pain, isolation and poverty, could contribute to higher rates of undiagnosed depression and suicide in older rural Australians (Buys, Roberto, Miller & Blieszner, 2008).

2.5 Ageing and Suicide – The global context

In most regions of the world, suicide rates are highest in people over 70 years of age (WHO, 2014a). It is important to acknowledge that with ageing comes an increase in chronic conditions, decreased mobility, and deterioration in vision and hearing (Rooth, 2017). To age well and decrease physical and psychological deterioration, an older person should experience a good quality of life, have health conditions diagnosed appropriately (Rooth, 2017) and possess a positive perception of wellness (Footitt & Anderson, 2011).

Research on suicidal ideation and vision impairment in older populations suggests a need to identify protective factors for suicidal behaviours, such as informal support to family and caregivers (Smith, Cui, Odom, Leys & Fiske, 2020). This then reduces feelings of perceived burdensomeness, symptoms of depression and suicidal ideation (Silva, Ribeiro & Joiner, 2015). Older people are classified as a vulnerable group; and vulnerability can place this group at greater risk of poorer mental health (WHO, 2013). Of the total number of global suicides that occurred in 2016 (800,000 approximately), 80% (640,000) occurred in low to middle income countries, with 20% (128,000) of these occurring in rural agricultural areas (WHO, 2018).

“These vulnerable groups may (but do not necessarily) include members of households living in poverty, people with chronic health conditions, infants and children exposed to maltreatment and neglect, adolescents first exposed to substance use, minority groups, indigenous populations, older people, people experiencing discrimination and human rights violations, lesbian, gay, bisexual, and transgender persons, prisoners, and people exposed to conflict, natural disasters or other humanitarian emergencies” (WHO, 2013).

Shah and colleagues’ (2016) review on global suicide trends revealed suicide rates in males continued to increase with age from the age of 60 – 94 years, but then decrease slightly in the 94 – 99-year age group (Shah, Bhat, Zarate-Escudero, De Leo & Erlangsen, 2016). Conversely, suicide in women continued to increase from the age of 60 to 89 years and then decreases slightly between 90 – 99 years. Research on suicide in

older adults supports these findings, citing the need to “*integrate specific stress factors, such as feelings of social disconnectedness, neurocognitive impairment or decision making, as well as chronic physical illnesses and disability in suicide models and in suicide prevention programs in older adults*” (Conejero, Olié, Courtet, & Calati, 2018, p, 691). Suicide remains one of the main causes of death globally, and as the generation of “Baby Boomers” ages, so too do the suicide rates amongst older people (Eades, Segal & Coolidge, 2018; Blazer, Bachar & Manton, 1986 as cited in Conwell, Duberstein & Caine, 2002).

2.6 Suicide in older Australians

Research on suicide rates in older Australian males between the age of 55 – 64 years, suggest that long term unemployment increases the risk of suicidal behaviour (Milner, Page & La Montagne, 2013). In 2016, the rate of suicide in Australian males over 85 years was 34 per 100,000, with younger male suicide (50-54 years) reported at approximately 23.7 per 100,000 (ABS, 2017). Women had the highest suicide rate in the 50-54-year age group, although this was less than half the rate of men in this group (10.7 per 100,000) (ABS, 2017). Evidence suggests that current suicide rates in the 50 – 54 year age group, may be linked to a particular birth cohort of males born at the same time as the cohort of young males who died by suicide in the 1990’s, due to high unemployment rates (Milner et al., 2013). This early exposure to suicide may possibly have placed the current 50 – 54 year old cohort at higher risk of psychological deterioration in retirement (Joiner, 2005).

According to research conducted on the effects of birth cohorts and the link between older adult suicide rates in the early 2000’s, the exposure of this suicide epidemic to these older Australian males may have affected their ability to cope with the stressors of unemployment, or transition into retirement. Research conducted by Page, Milner, Morrell and Taylor (2013), clearly linked higher suicide rates in this cohort of older Australian males. Figure 2 highlights the (high) rate of suicide in Australian males aged over 85 years of age, and females between 50 and 55 years of age (ABS, 2016).

Whilst there are high rates of suicide in older males, it is important to note that they may have retired over 20 years ago. This study focused on rural areas of Australia

and it is commonly known that retirement in rural Australia has no pre-determined retirement age, particularly in the agricultural sectors. This is reflective of the level of strongly held identity for rural dwelling adults (Alston, 2012), and the stoic nature of the farming community. Recent research on the use of coping techniques on older adults living and retiring in rural areas (Hull, Fennell, Vallury, Jones & Dollman, 2017) will be discussed further in the results of this study (Chapter 6).

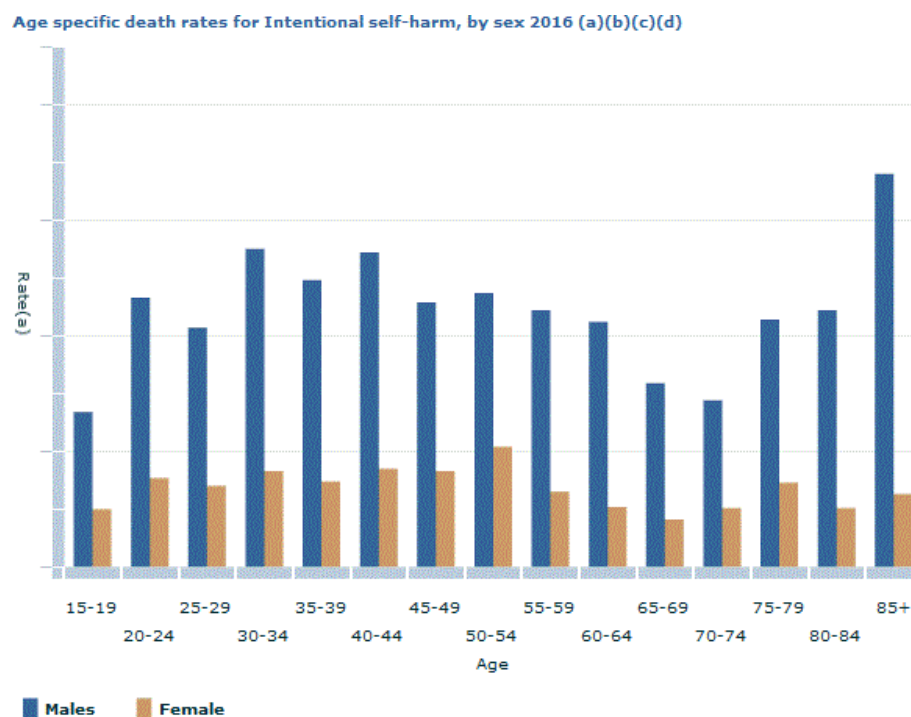


Figure 2: Age Specific death rates for intentional self-harm, by sex 2016(a).
(Source: abs.gov.au).

2.7 Rurality and suicide

One third of Australia's population live outside the major metropolitan areas (Services for Australian Rural and Remote Allied Health, 2018). Rural residents, particularly males, have been identified as having a greater suicide risk than those living in urban regions (Inder, Handley, Johnston, Weaver, Coleman, Lewin & Kelly, 2014). Rural communities are at a disadvantage in relation to service provision, have limited access to appropriate health services in some areas, and rely heavily on primary industry for employment. According to the Australian Bureau of Statistics (ABS, 2017), over half of Australia's land mass is operated by businesses related to agriculture. These factors increase the susceptibility of rural residents to the effects of the environment, such as

drought and climate change (McPhedran & De Leo, 2013) with rural residents having increased vulnerability to heat related stress (Horton, Hanna and Kelly, 2010).

Aboriginal and Torres Strait Islander people are heavily represented in rural and remote areas of Australia, experience the effects of historic social and economic disadvantage and many live with chronic health conditions. This cohort of rural residents will be even more disadvantaged with the added environmental changes created by climate change (Horton, Hanna and Kelly, 2010).

With reference to the topic of rurality in Australia, Guiney (2012), highlights the stressors on rural populations including; personality characteristics; the lack of ability to access appropriate services and supports; and the incidence of farming suicides compared to other male dominated occupations. Research conducted on farmers' help seeking skills demonstrated avoidance behaviours for physical and mental health issues. These were strongly linked to a "need for control and self-reliance" and "minimising problem and resignation" behaviours (Hull, Fennell, Vallury, Jones and Dollman, p.351, 2017). In addition to this there is a lack of awareness of the benefits of mental health services, or an inability to access these services due to geographic isolation (AIHW, 2017). Farmers are less likely to access mental health services due to the stigma of mental illness (Kunde, Kolves, Kelly, Reddy & De Leo, 2018), high workloads, and lack of access, either perceived or real (Judd, Cooper, Fraser & Davis, 2006a). Farmers in live-work situations have increased levels of stress, with weekends included as a standard work day and increased psychological pressure due to ongoing work and family commitments (Alston, 2012). Effects from environmental change are major contributors to an increased risk of suicide in this group (Alston, 2012). Factors that are outside the control of the rural resident (such as global economics, climate events, societal change and financial adversity) may compound, leading to high levels of psychological distress and an increased risk of suicide (Gunn, Kettler, Skaczkowski, Turnbull, 2012).

Fragar and colleagues (2013), analysed the relationship between rural farmers, and workplace injuries, focusing on mental health and pre-existing depressive symptoms (Fragar, Inder, Kelly, Coleman, Perkins & Lewin, 2013). Findings revealed that the presence of alcohol consumption and psychological distress contributed to injuries in the domestic/farming setting, with differing patterns of cause-specific mortality by different

agricultural production regions. Although this study focussed on unintentional injury in farming communities, not deliberate self-harm, it is important to understand these stressors may provide a more complete picture of the complexities of suicide in rural Australia. As a result this research may have been the unintended victim of the under reporting of deaths by suicide as outlined in De Leo and colleagues' (2010) research in the Australian context.

There is need for further discussion and research on the impact of suicide in rural communities, greater understanding of the specific needs of farming communities (Kennedy, Maple, McKay and Brumby, 2014), continued investigation into high suicide rate in older rural males and the risks and protective factors for this group (Shah, Zarate-Escudero, Bhat, De Leo, & Erlangsen, 2014). This will help encourage changes to existing policies and improve funding and access to suicide prevention programs. This suggests the need to, account for the influence of social and economic conditions, and address the health inequalities associated with living in lower socio-economic areas (Page, Morrell and Taylor, 2002).

There is a need for greater accuracy and consistency of reporting data when a person dies by suicide. Increased accuracy and consistency of standardised reporting and classification for recording cause of death in Australia, will address concerns over inconsistent processes for coronial enquiries that struggle to determine 'intent' as well as a lack of appropriate training for those preparing suicide reports (De Leo et al., 2010). Australian studies demonstrate that the use of 'undetermined death' as a death category may contribute to under-enumeration of suicide data (Burvill, McCall, Stenhouse & Woodings, 1982) although this may be more likely in those who practise a religion where suicide is not acceptable, or with older migrants (Page, Taylor and Martin, 2010).

2.8 The impact of drought on suicide rates

Between 2016 and 2018, the state of New South Wales, Australia, experienced one of the worst droughts in recorded history (DPI, 2018). Figure 3 highlights the rainfall deficiencies at the start of this research study, demonstrating the areas most affected were the outer regional and remote areas of Australia. (Australian Bureau of Meteorology, (BOM) 2018). The Australian Bureau of Statistics determines remoteness in relation to distance from services and ability to access services (Figure 4) (ABS, 2016).

Because of the drought, the Australian Federal Government and the New South Wales State Government introduced incentives to assist local farmers with fodder, financial aid, donations and financial counselling (The Farm Household Allowance, The Farm Management Deposits, The Managing Farm Risk Program, The Drought Concessional Loans and The Regional Investment Corporation). (National Farmer's Federation, 2018). In addition, charitable programs, such as Thirsty Cow, Rural Aid, and the Country Women's Association (CWA) provided grocery and household expense vouchers (National Farmer's Federation, 2018).

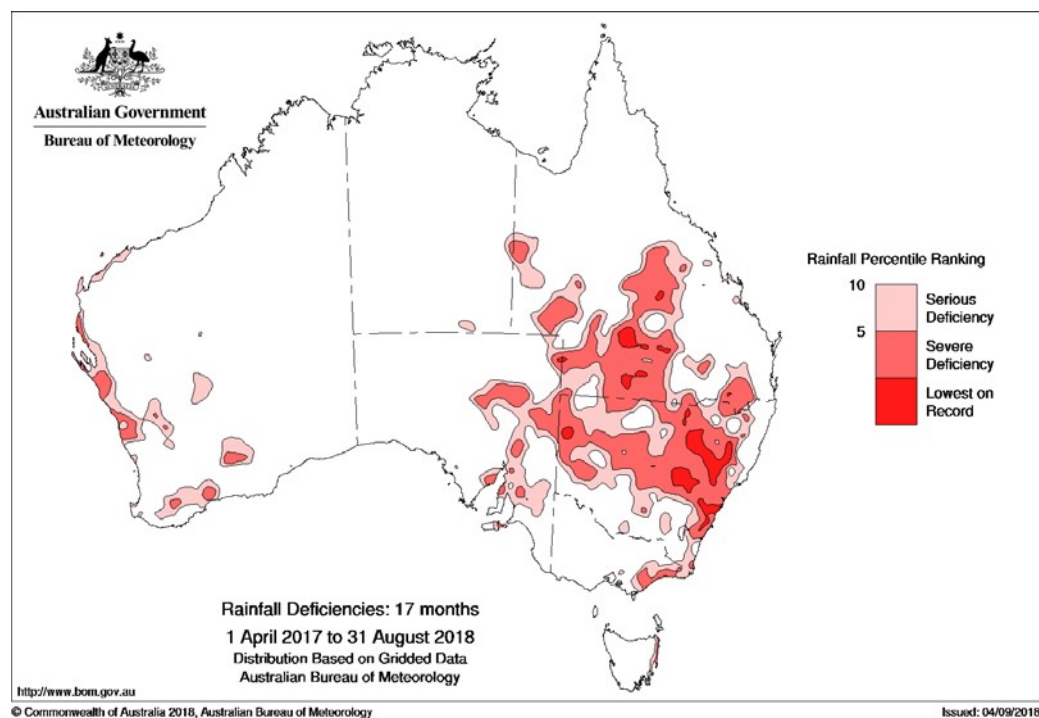


Figure 3: Rainfall deficiencies in Australia (Source: Bureau of Meteorology (BOM). www.bom.gov.au)

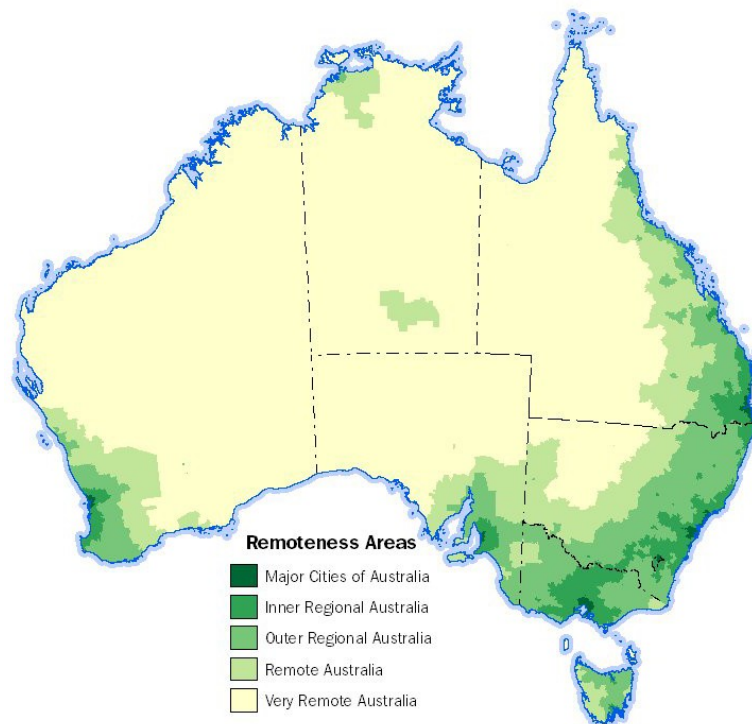


Figure 4: Remoteness Areas of Australia. (ABS, 2018).

The impact of drought was first mentioned in the grey literature published between 2015 and 2018. In 2017, The Land newspaper reported that the Centre for Rural and Remote Health suggested that current suicide prevention programs were not working in rural Australia, as the suicide rate was 50% higher than in urban Australia (Druce, 2017). Although not reported in direct correlation to the drought, Australian figures reported a 10 year high in rates of suicide in males over 45 years, and the standardised suicide rate for women had also reached a ten year high (ABS, 2017). National suicide statistics show that suicide rates in rural and remote areas are 1.7 times higher for older people, Aboriginal and Torres Strait Islander people, farmers and young men, compared to people from urban Australia (AIHW, 2017; Bishop, Ransom, Lavery, & Gale, 2017).

This phenomenon will be explored further in Chapter 3, which outlines the methods used in this study, describing the underpinning theories used to inform the research method, data collection and analysis, including the exploration of risk factors along with any possible protective factors between retirement pathways, employment transitions, mental wellbeing and suicidal behaviour.

Chapter 3: Methods

3.1 Introduction

This study was originally designed as a mixed method study that aimed to investigate whether there was a relationship (correlation) between forced redundancy/retirement in rural areas and suicidal behaviour, by rurality, locality and agricultural industry.

Initially, the study intended to use:

- 1) Quantitative methods to investigate suicide deaths by region and occupation and
- 2) Qualitative methods to investigate whether forced redundancy or retirement in these regions had an impact on mental health and wellbeing (potentially leading to suicidal behaviours).

After initial literature searching and inquiry it became evident that although there was a detailed literature on suicide in rural areas in Australia, the potential to link these events to the retirement experience was beyond the scope of this thesis. As a result the research methodology was altered so that a qualitative approach could fully encapsulate the phenomenon of retiring in rural Australia. The study commenced in 2015 at The University of Western Sydney University (now Western Sydney University) after being approved by the Human Research Ethics Committee (Protocol Number: H12022) (Appendix 2). The researcher continued to study through the University of Sydney until the completion of the thesis.

3.2 Study Aims

This study aimed to investigate retirement in rural Australia, with a key focus on the pathway to retirement and the mental and physical wellbeing of older rural Australians. This study used a qualitative approach underpinned by phenomenological theory to investigate the lived experiences of NSW rural residents aged over 45 years who had, or who intended to, retire either voluntarily or through redundancy, illness or injury and attempted to understand the lived experience of the phenomenon of retiring in rural Australia. (Van Manen, 2017). This study attempted to achieve three key research

objectives, with results adding to the existing body of research, focussing on the needs of older rural Australians. They were:

1. To investigate the association between retirement pathways and mental wellbeing and suicidal behaviour in older age rural Australians, residing in New South Wales
2. To explore risk factors as well as investigate any possible protective factors between retirement pathways, employment transitions, mental wellbeing and suicidal behaviour
3. Provide context specific recommendations to inform suicide prevention policies and programs in older Australians in a rural context

3.3 Study setting

The Murrumbidgee region, in rural New South Wales, was chosen as an area from which to recruit rural residents, due to the higher than average suicide rate in the region (Life Span, 2018). After poor recruitment (seven participants), the recruitment was expanded to incorporate all rural New South Wales. Stakeholder recruitment occurred through Suicide Prevention Networks, Rural Health services and the agricultural industry across rural New South Wales.

3.4 Study participants

Discussion as to the type of participants to include in the study was undertaken by the researcher and the Supervisory Panel. Initially with the mixed method study in mind, it was determined that the following groups of participants would be included to enable correlations to be undertaken between suicide or suicidal behaviours and retirement trajectory. These groups were included in the ethics application and were subsequently approved by the HREC. As a result, when the study methodology altered to a qualitative approach participants were recruited from these groups.

- Group 1- NOK (Next of Kin) – Lived Experience (has had a family member die by suicide in the last 10 years, who was either working or retired and over 45 years of age). This group was interviewed to discuss the employment and/or retirement trajectory of the person who died by suicide.

- Group 2- Lived Experience (has had lived experience of suicide and is either retired or working and over 45 years of age). This group was interviewed to discuss the employment and/or retirement trajectory of the person who died by suicide.
- Group 3 – Retired or working (has not had any lived experience of suicide, either themselves or through the loss of a family member and is over 45 years of age). The aim of interviewing this group of people was to analyse the employment and/or retirement trajectory of the participant who has not had any experience of suicide, either themselves or from the loss of a family member, to capture employment or retirement experiences.

3.5 Study method

A phenomenological approach enables the researcher to investigate the lived experiences of participants through rich in-depth exploration of narrative and life stories. This approach is particularly useful when investigating sensitive topics such as the implications of retirement on suicidal ideation (Liamputtong, 2012).

Life experiences affect the clarity of understanding and analysing information in a research context. This is an essential part of understanding phenomenological inquiry (Liamputtong, 2007). To counteract the experiences and understanding of the researcher and to enable participants' own experiences to be heightened, the researcher engaged in recording of a reflective journal throughout the process (using both audio and written methods), to ensure the clarity of the data analysis and interpretation. In addition, the researcher chose to use Peavey's Art of Strategic Questioning (Peavey, 2008), to elucidate the experiences of the participants and to discover the meaning behind the text (Van Manen, 2006 as cited in Grace, Higgs and Ajjawi, 2009) in the context of mental and physical wellbeing when applied to retirement in rural Australia.

Peavey's Strategic Questioning Manual (Peavey, 2000) is designed to encourage the research participant to discover their own strategies for change, understand their past and current experiences, with the idea of empowering the participants to understand and enable them to verbalise whether there had been any change in their understanding of

their own life. This was used to elucidate the phenomenon of retirement. Questions were designed to focus on the following:

- ✚ Describing the issue or the problem (Focus, observation, analysis, feeling questions) This is when the facts of the issue are presented to the researcher.
- ✚ Strategic questions (visioning, change, personal action questions) (Peavey, 2000, Peavey, 2008).

Interviews and focus groups were used as previous research indicates that families living in rural Australia are less willing, and or unable to discuss issues relating to psychological or physical stress, for a number of reasons; the supposed stoic nature and personality type of farmers (Gunn, Kettler, Skaczkowski and Turnbull, 2012); and the reluctance of farmers to divulge personal information for fear of judgement, due to living in a close-knit community, (Judd et al., 2006c). Using focus groups and interviews gave the researcher the best possible opportunity to gain accurate and relevant information from participants.

The study was conducted in three phases and included two literature reviews and qualitative interviews and focus groups with rural residents and key rural stakeholders. The methods used in each of these phases are presented below.

3.5.1 Phase One (Literature Reviews)

The first literature review was conducted to investigate the published literature on the topic of suicide in older rural men. Using the terms 'elderly' and 'older males' and then combined with 'rural', 'suicide' and 'Australia', to investigate the amount of research that has been conducted on the factors relating to suicide in older rural Australian males over the course of the previous 5 years prior to the literature search being conducted. Researchers conducted a Narrative review of the papers, extracted and analysed the data relating to the study area and compiled the work into themes for purposes of writing the literature review. Further methods are detailed in Chapter 4 of this thesis.

The results of this second review informed the study method and resulted in the inclusion of both males and females as study participants. The second literature review on retirement pathways was conducted to investigate current practice in retirement

pathways and to assist in identifying the relationship between retirement pathways and suicidal behaviours in rural communities. Primary search data bases were searched and literature from the previous 5 years prior to the literature search being was analysed, with researchers conducted a second Narrative review of the newly discovered papers, extracted and analysed the data relating to the study area, and compiled the work into themes for purposes of writing the literature review. Further methods are detailed in Chapter 3 of this thesis.

3.5.2 Phase Two (*Rural resident participants*)

3.5.2.1 Recruitment:

Participants from the general community were recruited using advertisements in rural communities, local newspapers and local suicide networks. (Appendix 3). Additionally, snowball sampling was used to elicit responses from participants who met the eligibility criteria for the study (Crabtree and Miller, 1992, p.40). Participation Information sheets (Appendix 4) and informed consent documents (Appendix 5) were provided to all interested participants. No participant was enrolled into the study unless they had provided informed consent. Recruitment continued until data saturation was reached.

3.5.2.2 Data collection:

A demographic questionnaire was developed (Appendix 6) and collected information on: age, sex, length of time living or working in the area, occupation (current or previous), work status and marital status. Open ended questions were developed, based on Peavey's (2008) semi-structured interview techniques, to enable the participants to describe their transition into retirement; feelings associated with retirement; the reality/alternative realities of retirement; and the impact of retirement on their physical and mental wellbeing.

Qualitative data was collected from face to face interviews and telephone interviews of approximately 1 hour in duration. An interview schedule was developed (Appendix 7) and consisted of an introduction to the study, an introduction to the researcher, detailed information about confidentiality and consent and a list of prompt questions designed to elicit responses to the research questions (Appendix 8). Participants gave permission to record the interview to ensure accuracy. To ensure that

participants felt comfortable expressing their lived experience with the researcher, consideration of the participant's level of vulnerability was given and participants were offered the choice of having a support person at the interview and the researcher monitored signs of distress in participants' (Liamputtong, 2012, p.304-305).

A Safety Protocol was developed (Appendix 9) and used by the researcher during the interview process. The researcher contacted the supervisor(s) prior to and following the interviews to ensure safety. The researcher had regular meetings with supervisor(s) to debrief about the interviews and identified any issues or changes required to interview questions. A current list of local health professionals was provided by the researcher to the participants and their family members, if any of the people involved in the study, experienced any psychological distress before during or after the interviews.

3.5.2.3 Data analysis

Data recordings were transcribed verbatim by a transcription service. Responses were de-identified using a coded numbering system. Once transcripts were available each transcript was read by the researchers (KCG and LW). Key phrases and words were identified, and codes developed for themes and concepts. Continuous immersion in the data, through a process of reading and re-reading the transcripts enabled the researchers to ascribe meaning to narrative and identify key themes that are discussed in Chapter six of this thesis.

3.5.3 Phase 3 (Rural Stakeholders)

3.5.3.1 Recruitment

Rural Stakeholders from Suicide Prevention Networks, Community Health Services, Rural and Remote support services and the Agricultural Industry were recruited between September 2017 and May 2018. Researchers analysed transcripts from rural stakeholders who were working with residents who were retired/ considering retiring in rural New South Wales. Data recordings were transcribed verbatim by the principal researcher (KCG), and together, the researchers (KCG and LW) coded data into key themes and sub-themes using an iterative process of review and discussion.

3.5.3.2 Data collection

Qualitative data was collected from face to face interviews and telephone interviews of approximately 1 hour in duration. Interviews were conducted in a location

to suit the participants or by telephone if required. Initial interviews were conducted by two researchers to ensure consistency in questioning and data recording.

Participants gave permission to record the interview to ensure accuracy. This part of the study attempted to answer the following questions;

1. What are biggest issues for older rural residents living in rural Australia?
2. What things do older rural residents talk about regarding accessing services?

3.5.3.3 Data Analysis

Data recordings were transcribed verbatim by a transcription service similarly to the participant data. Responses were de-identified using a coded numbering system specific to the stakeholder participants. Once transcripts were available each was read by the researchers and key phrases and words were identified. Codes were developed for key themes and concepts. The process of reading and re-reading the transcripts to ensure the researchers were familiar with the data enabled meaning to be ascribed to the narrative. These themes are discussed in Chapter 7 of this thesis. The following chapter discusses the findings from the participants' in relation to their feelings of retirement,

Chapter 4: Retirement Pathways: A Review of the International Literature

4.1 About this paper

This paper presents a review of the published literature on retirement pathways of older people across the globe, to investigate current retirement patterns, retirement transition, incidences of redundancy, and traditional and contemporary retirement pathways. The reason for exploring international literature was to determine the impact of Population Ageing, with a focus on suicidal behaviours and retirement in other similar Western countries. This paper has been submitted to the journal of Work, Ageing and Retirement.

Authorship

We agree that this is a true and accurate record of our contribution to this paper.

Concept

Crnek-Georgeson, K. T..... Date.....

Wilson, L. A..... Date.....

Data Analysis

Crnek-Georgeson, K.T.....Date.....

Paper development and Preparation

Crnek-Georgeson, K.T.....Date.....

Wilson, L. A..... Date.....

4.2 Introduction

Traditionally, a life course trajectory consisted of infancy, study, work and/or training (often with the one employer) followed by the traditional pathway to retirement at around sixty-five years of age (Guillemard, 2005; Gratton & Scott, 2016). Recent changes to retirement policies globally have impacted upon this traditional pathway (Organisation for Economic Co-operation and Development (OECD), 2019). Complex patterns of retirement are now common practice and include partial retirement, part time employment, or transitional retirement / work schemes. (Johnson, Butrica & Mommaerts, 2010). Many choose not to retire and work into their seventies or early eighties (Litwin, Achdut and Youssim, 2009; Carriere & Galarneau, 2011).

Rosen and Jerdee (1986) presented the concerns of almost 1000 executives in the United States of America (USA). This research identified that trends of early retirement led to shortfalls in the number of qualified higher-level executives, and that the then current retirement policies were not reflective of the changing demographic needs of the workforce. Holzmann (2013) reviewed global retirement trends, including changing demographics, reduced fertility and retiring 'Baby Boomers' (those born 1945 – 1964) in line with the impact of the Global Financial Crisis (GFC). This review acknowledged, that countries with a high income had begun the retirement review process with a three-point agenda:

- 1) to increase the personal contributions of employees,
- 2) to decrease the benefit of retiring early and
- 3) to delay the age of retirement.

In low to middle income countries, the expenditure of GDP on retirement pensions is around 0-2 percent, whereas in higher income countries, this figure is around 11percent. Across the world, the average older persons' pension expenditure is around 3.3 percent (Aegon 2018; Mercer 2019; OECD 2019; International Labour Organisation (ILO), 2014).

There is evidence to suggest that forced early retirement causes an increase in psychological distress leading to suicidal behaviours (Shah, Bhat, Zarate-Escudero, De Leo & Erlangsen, 2016). It has also been linked to higher levels of non-communicable

disease and coupled with the ‘double burden of disease’ (both communicable and non-communicable disease) across the world (Yiengprugsawan, Byles, Healy & Kendig, 2016). Vrkljan, Montpetit, Naglie, Rapoport & Mazer (2019) found only two literature reviews reporting the mental health of older people during retirement transition. Whether chosen or forced, retirement transition causes an increase in psychological stress particularly in older males (Byles et. al., 2016) and rural dwelling individuals (Laberon, Grotz, Amieva, Peres & Vonthron, 2019), increased psychological distress (Mein, Martikainen, Hemingway, Stansfeld & Marmot, 2003; Butterworth, Gill, Rodgers, Anstey, Villamil & Melzer, 2006), and increased risk of suicide in the first 5 years post retirement (Milner, Page, La Montagne, 2013). In addition, there is a ‘disconnect’ between the expectations and the reality of retirement (Longhurst, 2018; Wiseman & Whiteford, 2009), that places many future retirees and already retired older adults at greater risk of increased suicidal behaviour (De Leo, Hickey, Neulinger & Cantor, 2001).

Goodwin and O’Connor (2014) interviewed participants at the start and end of their working lives and compared the reality of retirement with the lived experience, highlighting workplace changes over time. For example, in the 1960s younger workers had limited exposure to older workers because older workers retired earlier. Many of the then younger workers who were re-interviewed on the cusp of retirement, reported an ideology of leisure and relaxation in retirement, although could not afford to live this expected lifestyle. The feeling of disconnectedness between dreams of retirement, compared to the reality of retirement, can be due to decreased financial capacity and increased health issues, despite improved medical advances and technology (Goodwin & O’Connor, 2014; Johnson, 2008).

Globally, life expectancy at birth is increasing, with Australia and New Zealand recording the highest life expectancy at birth (83 years) and sub-Saharan Africa the lowest (61.1 years) (UN, 2019). It is predicted that people will need to work into their seventies and eighties before retiring (Gratton & Scott, 2017), and with this in mind, it is disturbing that older adults record higher suicide rates compared to other age groups (WHO, 2014a; Bonnewyn, Shah & Demyttenaere, 2009; Szucs, Szanto, Aubry & Dombrovski, 2018; Wand, Peisah, Draper & Brodaty, 2018; Shen, Radford, Daylight, Cumming, Broe, Draper & Shen, 2018). These figures suggest that loss, such as the death of a spouse, unemployment, relationship breakdown, moving into formal care, or

retiring from the work force, increases social isolation, and are considerations for suicide risk in the older adult population (Joiner, 2005).

Compared to traditional retirement patterns, contemporary retirement will look very different over the next decade. The aim of this review was to examine literature investigating retirement pathways and the impact these pathways have on mental and physical wellbeing.

4.3 Method

4.3.1 Literature Search Strategy

A literature search (Figure 5) was conducted by the researchers using Medline, PubMed, Cinahl and Scopus. The search was limited to the previous five years (2014–2019). Search terms included: retirement, transition, redundancy and pathways. Inclusion criteria were: published in the 5 years between 2014 and 2019 inclusive, published in English and examining retirement transition.

A total of 204 articles were initially identified. All abstracts were reviewed by the researchers and assessed for inclusion in the review. A total of 177 papers were excluded from the study as they did not meet inclusion criteria (Figure 5). After review and assessment researchers categorised the 27 included papers by study type using the Systematic Review Checklist created from the Critical Appraisal Skills Program (CASP, 2018). This was used to conduct a narrative review of the data.

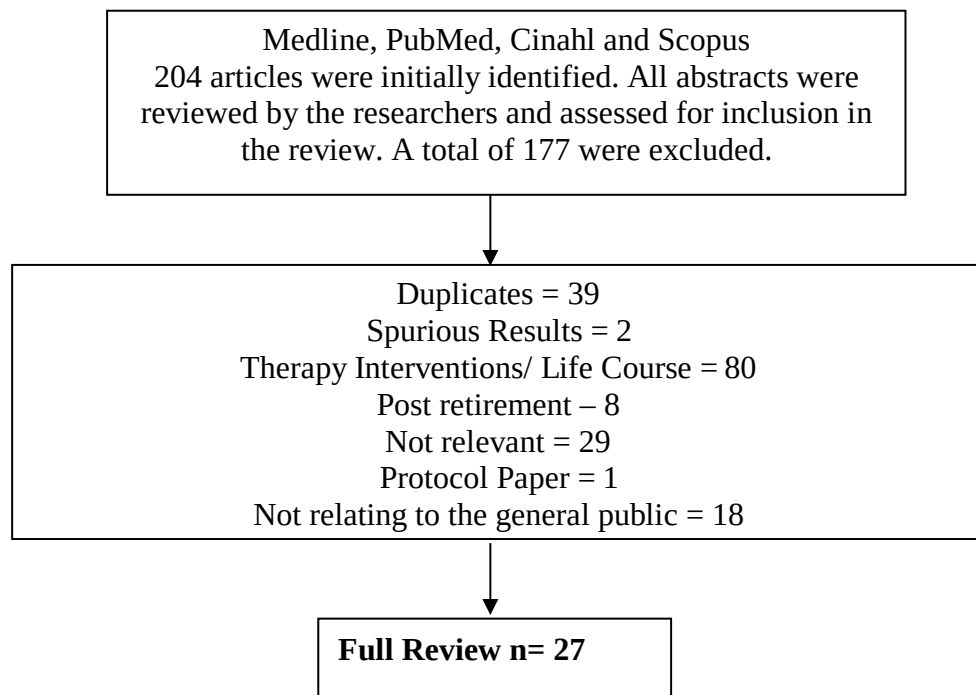


Figure 5 – Literature Search Strategy

4.4 Results and analysis

This review of published research on retirement pathways internationally included research from Australia (2), Canada (1), China (2), England (2), Finland (1), Germany (1), India (1) Netherlands (4), Spain (1), Sweden (3), United States of America (8), and one global cohort study from 51 non-western countries. Research methods included longitudinal analysis (19), cross sectional analysis (1), cohort studies (6) and systematic review (1). Papers were then reviewed by key topic and study type. Much of the published research on retirement is divided into pre-and post-retirement however papers explored the experience of retirement planning, general health, psychological health and social participation and the retirement experience.

4.4.1 Retirement planning

Three papers focussed on retirement planning, reviewing data on participants' ability to retire and whether this was dependant on gender, income, health and/or wellbeing. A study by Newton and colleagues (2019) reported women (n=236) had feelings of higher life satisfaction when they had a choice when to retire, compared to women who were forced to stay at work for financial reasons. People who wish to retire early but cannot due to financial other responsibilities are "Job locked" (Newton, Chauhan, Spirling, Stewart, p. 287, 2019). Newton and colleagues (2019) research on

levels of choice for older women, revealed one limitation of their research as the poor representation of older women who had not been actively engaged in the labour force for most of their lives. Recommendations from this research were; inclusion of marital status; work ability; planned or unplanned retirement; the level of importance that the participant places on their work identity; as well as a need to review how retirement affects women across the life course.

A study conducted in the USA, Italy and the UK investigated the decision-making process on the ability to plan for retirement in over one hundred participants. Findings from across the three countries, showed satisfaction in retirement was not necessarily linked to an ability to plan, but more to psychological resilience and adaptation to new circumstances (Principi, Smeaton, Cahill, Santini, Barnes & Socci, 2018) Principi and colleagues (2018) reported difficulty in applying findings to the broader population due to the size and nature of the qualitative method.

A third study focussed on the ability of workers in the USA (n=1400) to continue working, when living with chronic deteriorating health conditions (Boissonneault and de Beer, 2018). Workers who had a lower work ability score were more likely to experience early inactivity prior to retirement and disability, with more years of unemployment prior to retirement, causing increased psychological distress. Estimations on work ability trajectories was presented as a research weakness by Boissonneault & de Beer (2018) suggesting that their categories did not consider the actual class distinctions (socio economic status) and presented difficulties associated with the variable nature of retirees in the US context. Suggestions for future policy changes included mindfulness of the country of origin of retirement as there seems to be a greater level of heterogeneity in some countries compared to others. Although, that said, it may be an indication of the future, with the changing landscape of retirees across the globe. It is important to note the impact and control an individual has on their own retirement trajectory (Boissonneault and de Beer, 2018).

4.4.2 General health

Three papers reviewed whether changing resources impacted upon the health of retired participants. Hansson and colleagues (Hansson, Buratti, Johansson, & Berg, 2019) research on the retirement experience of almost 2,000 participants showed a

positive correlation between financial resources, autonomy, social interaction, understanding of cognitive ability, and the relationship to improved health in retirement. Yeung's (2018) research examined cognitive ability by evaluating any deterioration of physical and psychological health in employees/retirees in China in the 6 months prior to, and after retirement. Results from participants (n=236), demonstrated a change in cognitive resources including increased physical and psychological distress and decreased satisfaction with life. Yeung's (2018) research, included a much smaller study over six months, investigating links between cognitive ability and coping mechanisms. Future research could include a much larger sample to determine further causal links. These findings were also reflected in research conducted in Finland where Manty and colleagues (2018) reviewed changes in the physical and psychological health of retirees who retired due to disability, finding participants experienced poorer overall health and notable decline in psychological wellbeing (Manty, Kouvonen, Lallukka, Lahti, Lahelma & Rahkonen, 2018).

Van Zon and colleagues (Van Zon, Reijneveld, Galaurchi, Mendes de Leon, Almansa & Bultmann, 2019) research in the USA, involving over 10,000 employees, reported workers with multiple morbidities were at higher risk of transitioning to retirement earlier.. Researchers reported a strength of these findings was that they could be generalised for people considering retirement in the future. A limitation of this study however is that the health conditions of the participants was self-reported, and participants may not be receiving proper assistance with managing their chronic health condition. In addition, the researchers did not have specific information about the type of work and characteristics of employment to assist them. These findings were reflected in Manty and colleagues (2018) work in Finland, where a limitation of their research was that participants self-reported health status. A strength of the Finnish research was however that it was longitudinal and showed changes in the cohort prior to, and during the retirement transition.

Two additional US studies highlighted the implications of negative stereotypical behaviour in relation to retirement. Ng and colleagues (2016) US study of 1,000 participants investigated the presence of negative stereotypes linked to longevity and the retirement process (Ng, Allore, Monin & Levy, 2016). Almost three quarters of the participants reported negative feelings of physical and psychological health.

Interestingly, a much smaller study (n=10), by Sheppard and Welborn (2019) revealed similar outcomes, for women who had been forced to retire early. The participants in this study also commented on the negative impact that forced retirement had on their mental health, and, their inability to mentally prepare for this phase in their lives (Sheppard and Welborn, 2019). Ng and colleagues (2016), reported limitations of their research were stereotypes on retirement itself, and reported negative commentary regarding levels of physical and psychological wellbeing during retirement because of societal commentary on ageing and retirement as a process. Reflecting earlier commentary on future retirees being ill prepared for retirement, Sheppard and Welborn's (2019) research on a cohort of African American women, reported retirement experiences may have only been relevant to that group of women. One major strength of this research revealed that the women in this study all commented on being denied the opportunity to prepare for their retirement, although, despite this, they were able to achieve positive levels of optimism in retirement, improved health and greater access to resources. Researchers in the USA also experienced difficulties with the applicability of their research as the respondents were all employed in the higher education sector. More accurate results would have been achieved if they had not excluded women who were working in the home environment (Sheppard & Wallace, 2018).

4.4.3 *Psychological health*

Changes in psychological health during the retirement transition may be exacerbated by other events that impact on mental health. Such events may include: bereavement, loss of work status, disability, social isolation, increased perceptions of burdensomeness and ill feelings of belonging to family and friends. These situations may place older people at greater risk of psychological distress and have the potential to lead to suicidal behaviour (de Mendonca and Ivbijary, 2019; Joiner, 2005). It should also be noted that the retirement experience cannot be attributed to the mental or physical state of a person at a given period. According to Wildman, Moffat and Pearce (2018), childhood trauma occurring prior to the age of five years can affect an individual's coping ability when faced with major life transitions. Joiner (2005) reaffirms adversity in childhood is a risk factor for suicidal behaviour in adults.

In Sweden, Hansson and colleagues (2019) interviewed almost 800 men and women (60-66 years), to determine whether personality type impacted upon levels of

self-esteem. Participants who identified as extroverted, conscientious, and agreeable reported being satisfied with life, involved in their community and experiencing higher levels of self-esteem. Hansson and colleagues (2019) highlight the important role of self-rated cognitive ability, the interconnection between levels of autonomy and social support, relating specifically to the transition into retirement. Further research is needed to investigate whether the way participants retired, influences this trajectory. Hansson and colleagues (2019) also highlighted personality traits in relation to retirement, showing that extroverted individuals experienced a more positive retirement. This research found that people who had elements of neuroticism, experienced the more negative elements of retirement. Further research needs to be conducted to establish how much of an effect personality has on the ability to retire.

Similarly, in the Netherlands, Schwaba & Bleidorn (2019) reviewed changing personality traits of over 1,200 retirees (n=1222) in the first few months post retirement. In this group, levels of openness and agreeableness improved initially, but declined during the following five years, however emotional stability remained constant throughout this period. Bleidorn and Schwaba's (2018) large cohort study on decreasing levels of self-esteem in retirement used advanced statistical measures, although results are difficult to apply to individuals, due to the generic nature of the results. In this research investigating personality traits results indicate that major personality changes occur after retirement, although participants used a self-reporting mechanism for behaviour changes, therefore hindering the ability of the researchers to gauge a wide variety of behaviours.

Evidence suggests that the level of choice as to when to retire has a significant impact on mental health. American women (>55 years) forced to retire experienced a decrease in mental health (Sheppard and Wallace, 2018). Women in minority groups often experience greater instances of forced retirement (Sheppard and Wallace, 2018). Researchers in Sweden investigated 1,713 people and found that those who had higher levels of education, but lower perception of social status, were associated with higher odds of depression (Nyberg Peristera, Magnusson-Hanson, & Westerlund, 2019). Nyberg and colleagues (2019) reported the use of a new modelling technique, with an ability to report depressive symptoms in a large cohort study. Limitations of this study are a high number of dropouts, and limited heterogeneity (all participants had been employed prior

to retiring). Olds and colleagues (2018) investigated over 100 retired Australians, using observations of mental health (depression, anxiety and stress) to analyse time use, in the post retirement phase (Olds, Burton, Sprod, Maher, Ferrar, Brown, Van Uffelen & Dumuid, 2018). When participants replaced working activity with sleeping and physical activity, their mental health improved significantly (Olds et.al., 2018). This research used a method of self-reporting to analyse the range of mental health constructs around time use in retirement. A limitation of this research is the time frame used for collection points and the limited 12-month study period.

4.4.4. Social Participation.

The importance of membership of social groups was reported in several papers and were equally divided between working and retired individuals. Researchers in India analysed data from a large cohort study (n=5212) of social group membership and the effect on cognitive ability, work status and social participation. Participants who were working and participating in social activities had a higher cognitive score than those who were not working or involved in social activities. (Chanda & Mishra, 2019). This research in India reported exclusion from social activities and employment contributed to marked deterioration in levels of cognition in older adults, particularly those engaged in a highly intellectual role prior to retiring (Chanda & Mishra, 2019). Those who had been in a less challenging role, or who were working from home, had a lot slower cognitive decline.

A similar UK study evaluated social group membership (pre-and post-retirement), with participants who had two group memberships prior to retirement (Steffens, Cruwys, Haslam, Jetten, Haslam, 2016). This cohort had less risk of death if they maintained group memberships over a longer period. Steffens and colleagues (2016) review on social group membership had high levels of participation in their research (n=1,954) but did not provide any contextual factors of the individuals to understand the moderating effects of the retirement process. These results were also reflected in a global study of western and non-western cultures, with approximately 10,500 men and women who were transitioning into retirement (Lam, Haslam, Haslam, Steffens, Cruwys, Jetten & Yang, 2018). Although Lam and colleagues included over 10,000 participants in their study (n=10,513), this limited the contextual elements of participants. This was also reflected in research conducted by Steffens and colleagues (2016). Future research could

include examination of these contextual factors in the retirement process. Older adults in this study who belonged to multiple social groups experienced positive effects on their overall health and wellbeing. Similarly, research conducted in China found that membership of social groups is a protective factor against depressive symptoms, demonstrating that decrease in social interaction increases levels of depression and makes participants more susceptible to the negative aspects of the retirement process (Liu, Fang, Chan and Lou, 2019). This investigation of transitions and depression was divided into specific phases, to highlight the complexities of retirement (remained retired, transition to retirement, remained working). Limitations of this approach include unknown movement of retirees and a need to increase categories due to the temporal nature of retirement. Future research should include evaluation of depression symptoms and social group involvement.

Research conducted by Suanet and Huxhold (2020), however demonstrated that membership of a social group only assists with the transition to retirement and that the number of memberships deteriorates in the years following full retirement (Suanet and Huxhold, 2020). This research recommended increasing opportunities for retirees to join more social groups to improve long term physical and psychological wellbeing. Older cohorts retained friendships, but those in the younger retiring cohorts retained social group membership for less time. Limitations of this research include a large gap in data collection points (three years) and that it would be beneficial to have collected data earlier to establish more accurate results on social group inclusion/exclusion (Suanet and Huxhold, 2020). Further confirmation that retirement is a time of increased stress and concern for older people, is highlighted by Kail and Carr (2019). Using data from the Michigan Health and Retirement Study (n=12,600) Kail and Carr (2019) showed that stress occurring from transitioning out of the paid workforce, can be reduced through increased social support networks.

4.4.5 *The retirement experience.*

Australian researchers analysed published literature on reasons why people decided to retire, relative to occupation, noting a focus on changing health factors across the transitional phases. (Eagers, Franklin, Yau, Broome, 2018). Genoe, Liechty & Marston, (2018) also reported findings using an online blog of recently retired Canadian 'Baby Boomers', revealing three distinct phases of retirement. Pre-retirement where

apprehension is present along with the thought of the ideal retirement, followed by initial transition, where participants tried to manage their free time. The final phase was mid transition, where participants learnt to balance structure and maintain levels of flexibility. This study, evaluating retirement transitions, reported the excitement and reservations of participants, however the research was over a short time period (6 months). If the study were longer, (like Boissonneault and de Beer's (2018) twelve-year study), results of the transitional process and participants' coping ability in the post transitional phase could be ascertained. Hurtado & Topa (2019) also reviewed this transitional phase of retirement (pre, during and post retirement), where participants evaluated levels of wellbeing by calculating lost resources, rather than gains in retirement. Classification of roles seemed to be a limitation of some smaller cohort studies (Eagers et.al., 2018; Hurtado & Topa, 2019) with Hurtado & Topa (2019) suggesting a need for future retirement training to include knowledge about physical resources (money) but also to encourage participants to be aware of their psychological and social resources, to help with the transition into permanent retirement.

Researchers from the Netherlands, analysed patterns of anticipated engagement in activities for over four thousand participants. Respondents reported activities would be determined by spousal interest, occupational status, and engagement in other roles in the community (Eismann, Verbeij & Henkens, 2019). Eismann and colleague's (2019) research attempted to establish perceptions of 'quality of retirement' depending on goals and plans that were able to be established for the future. Given the lack of literature on retirement pathways, researchers have noted that this is an area of further need if continuing to examine retirement pathways across the international landscape. Two papers reported on perception and subjective wellbeing in retirement. American researchers Sheppard and Stanford (2019) stated health professionals needed to understand women's perceptions of retirement to provide support with the transition of retirement. Similarly, German researchers, Schmalzle, Wetzel and Huxhold (2019) reported changes in social status was related to increased wellbeing and quality of life for retiring individuals, although life satisfaction was more of a long-term achievement, post retirement.

4.5 Discussion

This review aimed to describe retirement pathways, and their effect on mental and physical health. Overall, it found that the process of retiring can be a time of uncertainty, with evidence suggesting that older people are at risk of physical and psychological deterioration post retirement (Yeung, 2018; Van Zon et.al, 2019; Sheppard & Welborn, 2019; Manty et. al., 2018; Kail & Carr, 2019). Global disparities highlighted by De Leo and colleagues (2001) report increasing gaps between the retirement experiences of people living in Western countries, (United Kingdom and The United States), and Latin countries, due to varying retirement policies and disparities between men and women in relation to caring for older family members. Women tend to assume the caring role, therefore limiting their ability to engage in further education or employment, leading to a reduction in capacity to contribute to their own superannuation funds (WHO, 2017). Although the gender gap in pay equality is reducing, it is taking a very long time to equalise (Scott, 2016).

Research suggests a need to monitor how retirees feel about their own wellbeing in retirement, regarding quality of life (Schmalzle, Wetzel, Huxhold, 2019), and provide future retirees with an understanding of what retirement may look like, to support the individual through the planning stage (Hurtado & Topa, 2019). This may also help to alert retirees to the possibility that their lifestyle and subjective wellbeing may change (Eismann & Vergeij, 2019; Principi et.al., 2018), particularly if retiring due to multiple co-morbidities (Van Zon et.al., 2019; Hansson, Buratti, Johansson & Berg, 2019), unemployment or disability (Schmalzle, Wetzel & Huxhold, 2019; Boissonneault & de Beer, 2018) and/or forced early retirement through illness, or redundancy (Newton et.al., 2019). With Joiner's (2005) Interpersonal Psychological Theory of Suicidal Behaviour suggesting perceived burdensomeness in older age is associated with suicidal behaviours and increased levels of determination in completing a suicidal act, it is important to note that this is a complex pathway and needs to be addressed on an individual basis.

This review of the literature on retirement pathways highlights that retirement planning is a multi-faceted process. In addition, the review suggests that depending on the individual, many are unaware or unable to plan for the final phase of their working life (Principi et.al., 2018; Eismann & Vergeij, 2019; Mercer, 2016). Since the Second

World War retirement plans have been established across the world, although older citizens who live in third world countries (Midgley, 2012) or far away from an urban area (De Leo et al., 2001) still experience extreme disadvantage.

With increased longevity and improved health, many view retirement through a psycho-social lens, and plan for retirement in line with this new trend, making retirement planning a less financially driven exercise than in previous years (Dennis and Fike, 2012). Major economic changes, such as the Global Financial Crisis (Reserve Bank of Australia, 2020), changes in working patterns across generations (Johnson et. al., 2010) coupled with Population Ageing (WHO, 2002, WHO, 2015) are only some of the reasons for review of current trends in retirement practises.

Formalised retirement schemes are complex and can include; programs of upfront payments of large sums of money in return for small weekly payments in retirement (Morse, 2018), formal planning meetings with retirement planners (Tannahill, 2014), compulsory employer contributions over the course of a person's working life (Australian Government, Federal Register of Legislation, 2019) or tailored retirement planning depending on the employer's retirement policies. Many countries across the globe have increased the age at which retiring workers can access financial support upon cessation of work (OECD, 2019), and with current research suggesting "half of today's newborns will live to be 100" (Gratton & Scott, 2017, p.1), employers and health professionals need to increase levels of support for older workers beyond the traditional retirement age (Gratton & Scott, 2016; Mc Clymont, 2017). The Whitehall Longitudinal study (Mein, Martikainen, Hemingway, Stansfeld & Marmot, 2003) indicates psychological health deteriorates in people who continue working in the higher economic sectors yet improves once retirement begins. Participants working in middle to lower economic sectors experienced decreased overall wellbeing, including psychological and physical functioning and reduced ability to continue working into older age. With retirement policies increasing the age of access to retirement benefits, older people are being encouraged to stay in the workforce in Australia (Australian Government, 2015) and across the world (Gratton & Scott, 2017). It must be noted however that this also raises the issue of employment opportunities for younger members of the workforce, who, in a diminishing environment of job opportunities may be further

disadvantaged because of continuing employment for older workers (Axelrad, Malul and Luski, 2018).

The Homemakers Aegon Retirement Readiness Index Survey (ARRI) indicates savings and preparedness behaviours of individuals across seventeen countries, using a score out of ten (Aegon, 2018). According to this survey, people, in general, are not prepared for retirement, except for China (6.73) and India (7.13). This may be indicative of the nature of this report developed by the life insurance sector, as participants self-report on their ability to save money for retirement. One could assume that participants are employed in the higher economic sectors, whilst those in the middle to lower sectors may not have the capacity to save, and therefore are unable to plan for retirement (CEPAR, 2018; Mein et. al., 2003). Interestingly, the self-reported readiness and attitude towards retirement ratings have only increased slightly from 2012 (5.2) to 2018 (5.9). Aegon's Retirement Readiness Survey (2018) suggests three megatrends effect the ability for an individual to plan for retirement; reduction in retirement benefits, life expectancy and knowledge of individuals to understand that retirement can be affected by global trends.

The Melbourne Mercer Global Pension Index (2019) compares thirty-seven countries and their retirement policies. This Index reports issues of economic instability, including debt owed to other countries, inability to pay older age pensions, concern over an individual's access to pensions in developed and developing countries, and provision of appropriate retirement products for the future generation of retiring individuals. Two countries, the Netherlands and Denmark have an A grade retirement system (>80), due to a high level of sustainability, strong pension system and good benefits at retirement. Australia followed a close second (75-80) for its high level of integrity and reliability, with Korea, China, Japan, India, Mexico, Philippines, Turkey, Argentina and Thailand evaluated as having D grade retirement systems (<35) due to large gaps in services that need addressing, or they are at risk of collapse.

This literature review highlights that individual's ability to plan for retirement is clearly affected by the bureaucracy of the workplace, understanding of their physical and psychological health (Principi et al., 2018; Boissoneault & de Beer, 2018; Newton et al., 2019) and the current global climate (Mercer, 2016). Linking negative commentary of

retirement and declining health status, future retirees are not fully aware of possible deterioration in health status after retirement (Ng et al., 2016; Applewhite, 2015). Employees may be in a vulnerable position prior to retirement, dependant on their understanding of the economy of the workplace, ageism in society (Fulmer, 2016) and their own personal level of health literacy (AIHW, 2018a). One example of good practice is that of a large multinational organisation which provides employees access to a ‘Transition to Retirement Policy’ (Fujitsu, 2019), with the employer acting as a conduit for employees to transition into retirement. This example policy contains information on eligibility (aged over 55 years, permanent full-time or permanent part-time employee), with a statement on the importance of retaining older workers, maintaining a phased approach to cessation of work, reduction in work load, work from home, reduction in working hours/ days being key components to longevity in the modern and future workforce.

Research conducted by Stancliffe and colleagues (2013), suggests that older people living with “*long term and lifelong disabilities such as Down Syndrome or intellectual disabilities are living longer*” (Stancliffe et al., 2013. P.3), with recommendations for strategies for retirement preparation in the Transition to Retirement Program. Recommendations of increased need for financial resources to support older workers that is similar in model to the transition into work for younger adults, such as high school leavers. Long term retirement programs should consist of lifestyle planning; increased social networks; opportunities for volunteering; creation of a new routine; and introduction of mentors to support future retirees with the transition.

It needs to be recognised that individual skills such as identified coping mechanisms, ability to adapt to change, understanding of reduced functioning, bereavement, and levels of resilience (WHO, 2002) vary and need continued adaptation to support a longer working life and an older age retirement. This review demonstrates a gap in current published literature regarding how older people can manage their own retirement plans, specifically relating to psychological and physical health.

4.6 Conclusions

With life expectancy increasing, employers need to be more aware of employee’s needs, both physical and psychological to assist with preparing for the transition into

retirement. To further support permanent retirees, this review also demonstrates that community representatives, allied health and medical professionals need to continue to support retired individuals by encouraging social participation, increased health literacy and cognitive stimulation. To ensure optimum levels of physical and psychological wellbeing there needs to be improved alignment between health system programs and individual needs.

Table 1 – Literature included in Review

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
	Experience of Retirement (6)						
1	Eismann, M., Verbeij, T., & Henkens, K. (2019).	Netherlands	Men and women aged (n = 4052)	Qualitative	Qualitative interviews with women who were forced to retire	Activities related to spousal interest, occupational status, engaged in other social roles and perception of time in the future	Established perception of quality of retirement as this was dependent on types of goals for the future and level of difficulty in ability to plan. Limitations were research was only in one country and may not be able to be generalised across the world, mandatory retirement age in the Netherlands and difficulties with accurate representation from participants regarding leisure activities.
2	Hurtado, M., & Topa, G. (2019).	Spain	Men and women aged (n=244)	Longitudinal study	Reviewed the relationship between resources of people who were retiring, their ability to retire was reviewed through the lenses of loss and gains in retirement, at three separate intervals in time.	Results showed that losses in retirement were able to be linked to feelings of wellbeing rather than gains in retirement.	Varying time points were used, with quality of life being assessed as a global construct. Noted that when planning for future retirement seminars, facilitators should consider a variety of factors that may influence decisions.
3	Stanford, D. (2019).	United States of America	Women aged 55 - 91 (n= 170)	Cohort Study	To understand women's perceptions of retirement and to help nurses with information to support the transition.	6 key themes arose, (Love it/ Happy, Unhappy/regrets, so much Time, so little (money, resources) Searching, Busy, Relief/Freedom, giving for me and Thee, Adequate Resources, Structure and Attitude	Need to monitor health and financial changes to assist women with transition. Limitations were the data collection area and many of the participants were active members of social groups.

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
4	Eagers, J., Franklin, R., Yau, M., & Broome, K. (2018).	Australia	Published in the last 15 years, peer reviewed, relating to work transition and comparison of jobs(n=15)	Systematic Review	Using NHMRC levels of evidence, factors for retirement were used to assess whether there was any difference between occupations.	Related factors included stage of work, how prepared a person was for retirement, transitions and being retired.	Classifications consisted of blue collar and white collar, with health being an important factor across all stages of transition.
5	Genoe, M., Liechty, T., & Marston, H. (2018).	Canada	Men and women who were approaching retirement or had retired (N=25)	Cohort Study	3 phases were highlighted -Pre retirement (apprehension about retirement and the thought of the ideal retirement, initial transition (participants were trying to manage their free time) and mid transition (where people have learned about balanced structure and flexibility	Despite difficulties with transition, many people in this study experienced positive retirements.	First study to analyse retirement transitions using an online blog, discovering concerns and excitement of retirement. Limitations were the time frame of the study - needing to follow participants further into the transitional phase of retirement.
6	Schmälzle, M., Wetzel, M., & Huxhold, O. (2019).	Germany	Men and women aged between 50 64 years (n= 6526) people who had retired between 1974 and 2013.	Longitudinal Cohort study	This study reviewed retirement and subjective wellbeing.	Subjective wellbeing of people who were employed prior to retirement did not change, however, those who were retiring from unemployment or disability, had a shorter term of wellbeing, followed by impacts of negative life satisfaction.	Reported an importance in monitoring the wellbeing of all retirees, how they are feeling about their own wellbeing in retirement, with regards to quality of life.
	Social Participation (6)						

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
7	Liu, H., Fang, B., Chan, J., & Lou, V. (2019).	China	Men and women of differing retirement stages, over the age of 50 years (n= 2364)	Longitudinal Survey	Impact of retirement status, about levels of social participation/ interaction and depressive symptoms over 12 months	Findings revealed individuals who remained retired had significantly fewer depressive episodes than those who were working, decrease in social interaction following retirement and then an increase in depressive symptoms.	Strengths included the breakdown of the transitional phase (Remained retired, transition to retirement, remained working). Limitations included unknown movement of retirees, due to using only 3 categories, as there may be more categories due to the temporal nature of retirement/ Only able to observe a small amount of activities- Future research should include evaluation of depression symptoms and social group involvement.
8	Kail, B., & Carr, D. (2019).	United States of America	Males and Females between 51 and 61 years (n= 12,600)	Longitudinal study	Whether structural support moderated the effects of retirement transition.	Belonging to multiples groups had a positive effect on health and wellbeing in retirement, across both Western and non-Western Cultures.	Encouraged people to start volunteering to decrease social isolation and improve resilience to the retirement process. Future research should encourage greater insight into the complexities of retirement.
9	Steffens, N., Cruwys, T., Haslam, C., Jetten, J., & Haslam, S. (2016).	England	Men and women born after 1954 (N= 848)	Longitudinal cohort study	Evaluation of social group membership before and after retirement.	2 group memberships prior to retirement had less risk of death if maintained over a longer period,	High number of participants (n=1954) although, did not provide any contextual factors of the individuals to understand the moderating effects of the retirement process. Future directions could include the examination of these factors in the retirement process.
10	Lam, B., Haslam, C., Haslam, S., Steffens, N., Cruwys, T., Jetten, J., & Yang, J. (2018).	Global	Men and women from 51 countries (Non-Western Countries- Average age of 66.83 years (N= 10,513)	Cohort Study	Evaluation of social identification into multiple groups and the effect on wellbeing and health, during transition to retirement amongst different cultures.	Belonging to multiples groups has a positive effect on health and wellbeing in retirement, across both Western and non-Western Cultures	Participants who trusted other group members had a happier and healthier transition into the retirement phase. Strengths of this research was the high number of participants in the study. Data collection categories were also a concern with limited choices for participants.
11	Chanda, S., & Mishra, R. (2019).	India	Men and women between 50 years and above (n=5212)	Cohort Study	Using cross sectional data from WHO, analysis was undertaken on interactions between cognitive ability and gender, work status and social participation.	Results showed that those who were working and currently participating in social activities had a higher average score than those who were not working or involved in social activities.	Those who had experienced a higher challenging intellectual role had a marked deterioration in level of cognition, Decline was also shown when there was exclusion from social activities. Recommended to increase the retirement age to continue cognitive stimulation. Limitations were not observing differences in gender and a large cohort study limiting the context of the individuals.

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
12	Suanet, B., & Huxhold, O. (2020).	Netherlands	Men and women Aged Born between 1928-1937 (n=971) and 1938 - 1947(n=991)- Total participants n=1962	Longitudinal Cohort study	Evaluating size of social networks in early and later retirement.	Networks created at retirement are not maintained in later retirement - are only used to assist transition into retirement phases.	More opportunities to increase networks in early retirement and maintaining of groups into full retirement.
	Health (6)						
13	Ng, R., Allore, H., Monin, J., & Levy, B. (2016).	United States of America	Men and women (n= 1011)	Longitudinal Study	Reviewed the impact of stereotypes and perceptions of retirement and how this can impact mortality risk (Life course perspective and situational context).	76% reported feelings of negativity about their physical health and 77% expressed negativity about their mental health. Need for more preparation for retirement, particularly psychological preparation, and increased positivity towards physical and psychological health	Future retirees are not aware of the link between main stream media's representation of ageing and retirement, and the effect that this has on deteriorating levels of physical and or psychological deterioration.
14	Sheppard, F.H., & Welborn, A. (2019).	United States of America	Women aged over 55 years(n=10)	Qualitative	Qualitative interviews with women who were forced to retire.	Focus was on the "Now What" with women sharing similar experiences, despite having differing reasons for retiring, all identified the inability to prepare mentally for retirement.	Most of the women in this study were African American and revealed forced retirement experiences that were unique to this cohort only. Findings suggest that nurses could prepare people for retirement by assessing their patient's ability to retire).

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
15	Mänty, M., Kouvonen, A., Lallukka, T., Lahti, J., Lahelma, E., & Rahkonen, O. (2018).	Finland	Men and women with an average age of 57.3 (retirees without disability) 52.9 years (retirees with disability) (n=2330)	Longitudinal Survey	Investigated any changes in health with retirees who were retired into statutory, disability and part-time retirement.	People with a disability who were retiring had poorer pre-and post-retirement health compared to statutory or part time retirees. Mental health did not change for statutory and part time retirees but clearly declined for those with a disability.	Levels of health functioning in retirement are linked to the reason for retirement. Occupational sector needs to be considered, along with the level of self-reported health status.
16	Van Zon, S., Reijneveld, S., Galaurchi, A., Mendes de Leon, C., Almansa, J., & Bültmann, U. (2019).	United States of America	Men and women aged 50-64 years (n=10,719)	Longitudinal study	Examined whether older works with multiple morbidities were more at risk in transitioning to retirement.	Workers with multiple morbidities were at higher risk of transitioning earlier than those without multiples morbidities (higher mortality risk).	Individual attention to these workers prior to leaving work, may assist with extension of their working life. one major strength was the ability of the findings to be generalised for people who were considering retirement in the future, although, although, participants were self-reporting whether they had a chronic illness.
17	Yeung, D. (2018).	China	Men and women, average age of 59.78 years (n= 128 retirees)	Longitudinal Study	To evaluate the physical and psychological health of older Chinese retirees- two time points were used - 6 months before retirement and 6 months after retirement.	Results showed that changes in cognitive resources predicted physical functioning, levels of psychological distress, satisfaction with life.	This study shows that levels of cognition can assist in predicting ability to adjust in retirement. Access to resources for improved mental health is vital in adjusting to retirement - Future research needed post 6 months retirement to determine further information.
18	Hansson, I., Buratti, S., Johansson, B., & Berg, A. (2019).	Sweden	Men and women aged 60-66 years (n=1924)	Longitudinal Cohort study	To investigate differences in retirement experiences, participants were assessed over a 3-year period.	Those who had higher autonomy, perceived cognitive ability, connections to social support, had better health and more financial resources.	Role of self-rated cognitive ability, levels of autonomy, social support, relating specifically to ability to transition into retirement, although, further research is needed to investigate whether the way participants were retired, may influence this trajectory.
	Psychological Health (6)						

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
19	Hansson, I., Henning, G., Buratti, S., Lindwall, M., Kivi, M., Johansson, B., & Berg, A. (2019).	Sweden	Men and women aged 60-66 years (n=796)	Longitudinal survey	Investigation of direct and indirect associations with personality types in relation to levels of life satisfaction across the transition of retirement.	Conscientiousness, agreeableness and extraversion had a positive correlation to whether participants were satisfied with their life, demonstrated by higher levels of self-esteem, more autonomy and involvement with society. Negative personality traits were neuroticism that was associated with poor self-esteem, lower levels of social support and decreased levels of autonomy.	Higher levels of neuroticism indicated higher risk and vulnerability during retirement transition. Further research is needed to evaluate the role of personality in retirement.
20	Bleidorn, W., & Schwaba, T. (2018).	The Netherlands	Retired men and women aged between 51 -81 (N=690)	Longitudinal Study	Evaluation of self-esteem during retirement.	Average retiree's self-esteem decreased before retirement and remained stable into the 5 years of retirement.	Use of a large data base limited individualisation and applicability, although a strength was the use of the ability to monitor changes in self-esteem during retirement.
21	Nyberg, A., Peristera, P., Magnusson Hanson, L., & Westerlund, H. (2019).	Sweden	Men and Women average age of 64.7 (Males) and 64.5 (Females) (n=1713)	Longitudinal Study	To identify groups of people with similar depressive symptoms at the time of retirement.	Researchers noted that higher levels of education and lower levels of feelings of social status were associated with higher odds of depression in both genders.	New modelling technique to report depressive symptoms. Due to experiencing a high level of drop outs, data can't be used across the population, due to limited heterogeneity, as well as participants had all been employed prior to retiring.
22	Olds, T., Burton, N.W., Sprod, J., Maher, C., Ferrar, K., Brown, W.J., Van Uffelen, J., Dumuid, D. (2018)	Australia	Men and women (N=105)	Longitudinal study	Retirees were followed 6 months prior to retirement and 12 months after retirement, assessing depression, anxiety and stress.	Mental health improved overall and replacing working activity with physical activity or sleep had a positive effect on mental health.	Strength in the assessment tool assessed various ranges of mental health constructs. Limitations were the use of self-reporting data by participants and the time frame used for collection points and the limited study period of 12 months.
23	Schwaba, T., Bleidorn, W. (2019).	Netherlands	Men and women aged between 51-81 N=1222	Longitudinal study	Contributing information over a period of 5 years, participants were observed whether their personalities developed during the retirement transition	Post one month, participants experienced increases in openness and agreeableness, although, this declined during the next 5 years, although, emotional stability remained constant before and after retirement,	Major personality changes occurred after retirement, although, participants used a self-reporting mechanism for behaviour changes, therefore hindering the ability of the researchers to gauge a wide variety of behaviours.

	Selected Papers	Country	Target Population	Study Type	Retirement Pathway	Findings	Strengths/ Limitations
24	Sheppard, F.H., & Wallace, D. (2018).	United States of America	Women over 55 years (n=80)	Cross sectional study	Evaluation of whether the type of retirement (forced or chosen), correlated with mental health and socio demographics.	Women with forced retirement had worse mental health outcomes, women who were in the minority had more instances of forced retirement than white women.	Suggestions that women have poor mental health outcomes when forced to retire early and that practitioners need to be aware of this when consulting with women in this cohort, particularly those women who are in the minority groups. Discussion on provision of therapy based programs to help alleviate the stress of transitioning into retirement.
-	Planning for Retirement (3)	-	-	-	-	-	-
25	Principi, A., Smeaton, D., Cahill, K., Santini, S., Barnes, H., Socci, M. (2018).	England, Italy and United States	Women and men - Average age 61, 60 and 62 (England 41, Italy 40 and United States 30 n=111)	Longitudinal Study	Investigated decisions and plans for retirement, and whether there was any expected change in lifestyle.	Two trajectories of planners - fulfilled and thwarted planners, Anxious drifters, Optimistic Drifters.	Psychological resilience and resources were very important, regardless of planning, coupled with satisfaction (for many, success in retirement is equal to maintaining the status quo such as lifestyle, community interaction, upholding of values.
26	Boissonneault, M., & De Beer, J. (2018).	United States of America	Men and women Aged between 53-54 and 65-66 (N=1417)	Longitudinal analysis	3 Work ability trajectories were identified (Low, declining and high) Low WA leads to an early gradual retirement.	Workers with Declining and low work ability were at greater risk of unemployment, poor health and early retirement.	Strengths of this study were the length of the study (12 years), with researchers able to follow the full range of transition into retirement. Issues with determination of the term 'retirement pathway', difficulty recording people who moved in and out of retirement, future policy recommendations should take this impact into control and evaluate each as an individual.
27	Newton, N., Chauhan, P., Spirling, S., & Stewart, A. (2019).	United States of America	Women over the age of 66 (n=236)	Longitudinal Cohort study	Examines the role of forced retirement vs voluntary retirement (relationships between choice, wellbeing and work status).	Findings revealed individuals who remained retired had significantly fewer depressive episodes than those who were working, decrease in social interaction following retirement and then an increase in depressive symptoms.	Need to examine how retirement effects women within the life course. There wasn't any difference in levels of life satisfaction with women who chosen to stay on at work, as opposed to women who had to stay at work. This needs to be examined further into the future. Limitations included the demographics of the women in the study (white, upper class, Baby Boomers) and older women were not represented well in this study.

Chapter 5: Factors influencing suicide in older rural males: A review of Australian studies

5.1 About this paper

Based on the evidence that older rural men have a higher rate of suicide than any other age group, and, in the knowledge that this could be further accentuated by environmental conditions, such as drought, floods, globalisation, isolation and changing family dynamics (Alston, 2012), a review of the literature was conducted to investigate suicide in rural males. The initial literature search results revealed a dearth of literature on women in retirement, so it was decided to only focus on males and allow the study to explore the experiences of women through the phenomenological approach. This paper was published in the Journal of Rural and Remote Health as Factors influencing suicide in older rural males: A review of Australian studies (Vol 17 Issue 4. 15th October 2017. (Appendix 1).

Authorship

We agree that this is a true and accurate record of our contribution to this paper.

Concept

Crnek-Georgeson, K. T..... Date.....

Wilson, L. A..... Date.....

Data Analysis

Crnek-Georgeson, K.T.....Date.....

Paper development and Preparation

Crnek-Georgeson, K.T.....Date.....

Wilson, L. A..... Date.....

Page, A.....Date.....

5.2 Introduction

In the Australian population, the highest rate of suicide (38.3 per 100 000) is found in men aged 85 years and older (ABS, 2013). Both suicide and intent to die by suicide are associated with depression and extreme stress in older people (Sorenson, 1991; Aday, 2002; Shah, Zarate-Escudero, Bhat, De Leo, Erlangsen, 2014). In men, suicide rates increase with age in Asian and English-speaking countries, particularly amongst the 'older old' (i.e. more than 80 years of age) (Pritchard & Baldwin, 2002; Erlangsen, Bille-Brahe, Jeune, 2003; Shah et al., 2014). Suicide in this group has been attributed to increased mental illness, family conflict and long-term or chronic illness (Pritchard & Baldwin, 2002; Erlangsen, et al., 2003; Shah et al., 2014). Over the past 25 years, suicide in Australian rural communities has been widely researched; however, the focus has been predominantly on younger males (Bourke, 2003; Page, Morrell, Taylor, Dudley, Carter, 2007) and all aged farming populations (Caldwell, Jorm, Dear, 2004; Judd, Jackson, Fraser, Murray, Robins, Komiti, 2006b; Guiney, 2012; Arnautovska, McPhedran, De Leo, 2013; Kennedy, Maple, McKay, Brumby, 2014).

The rates of rural farmer suicide vary by age and state, with research in Queensland suggesting the highest rate of rural suicide is in male farmers aged 18-34 years (Arnautovska et al., 2013), with the National Rural Health Alliance stating that farmers aged 55 years and older accounted for two-thirds of all farmer suicides (National Rural Health Alliance, 2015). The reasons for an increased rate of suicide in rural males compared to urban males is unclear but suggests that factors other than mental health disorders may influence suicidal behaviour (Kennedy et al., 2014). Several initiatives designed to reduce the risk of suicide in all age groups have been developed and implemented around Australia (Dudley, O'Neil, Koivo, Graham, Chapman-Mosh, Mendoza, Duff & Mc Glaughlin, 2009; Department of Health and Ageing, 2008, 2016). Although services are targeted for specific locations, including rural communities, the extent to which these initiatives modify the factors leading to suicidal behaviour, or improve access to services that may reduce suicidal intent, seems unclear (Department of Health and Ageing, 2016).

Reviews of research into rural male suicide by Alston (2012) and Handley and colleagues (Handley, Inder, Kelly, Attia, & Kay-Lambkin, 2011) investigate the

differences in urban and rural suicide. Alston highlights the multiple factors that contribute to increased suicide rates in all aged rural men, including farming under stress, the reluctance of men to utilise health services, the stigma of mental illness, stoicism, threatened masculinity and changing rural practices (Alston, 2012). Handley's review concluded that there are: (1) inconsistencies in terminology used in urban, rural and remote suicide research, (2) a reliance on cross-sectional studies, rather than studies that established causality and (3) a focus on urban suicide. Handley's review identified areas for future research, highlighting the importance of rural research that uses a longitudinal approach and includes community samples (Handley, Inder, Kelly, Attia, Kay-Lambkin, 2011).

Given the differences between suicide rates in rural males aged 75 years or more, compared to urban males the same age, it is reasonable to assume there are unique factors in rural communities that contribute to suicidal behaviour. To explore this further, this article reviews the Australian literature to investigate the factors unique to rural males that may be associated with increased suicidal behaviour or suicidal intent.

5.3 Method

5.3.1 Literature search strategy

A literature search (Figure 6) was conducted using electronic databases (MEDLINE (1950 - March 2015), PubMed (January 1976 - March 2015), and CINAHL (up to March 2015)). Terms included in the initial search were 'aged', 'elderly' and 'older males'. Results were then combined with the terms 'rural', 'suicide*' and 'Australia'. Secondary searches were conducted of bibliographies of identified articles and previous systematic reviews.

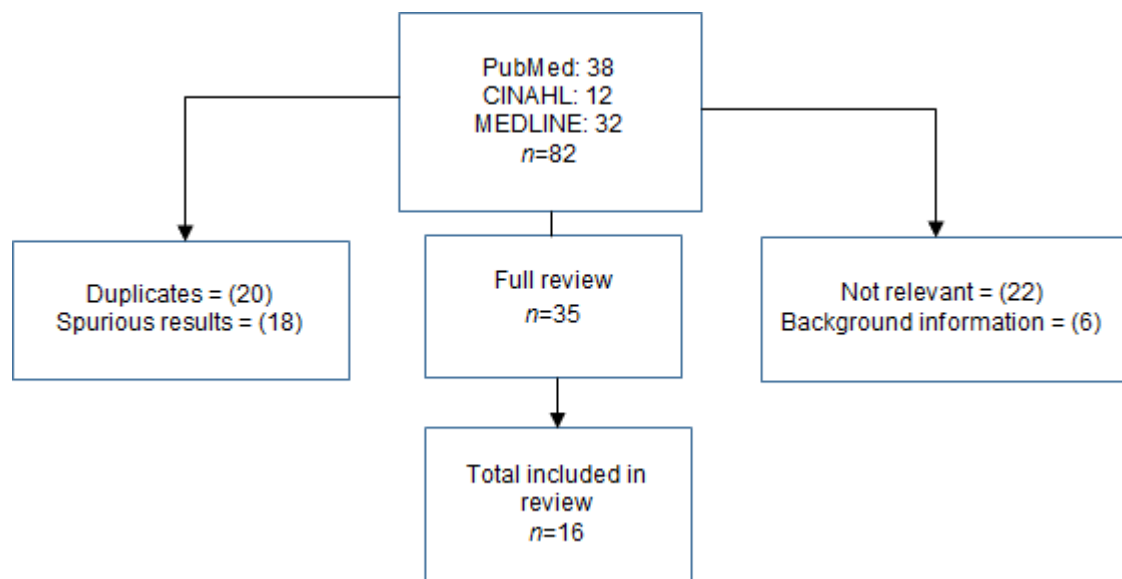


Figure 6: Literature search strategy

4.3.2 Inclusion criteria

To be eligible for inclusion in the review, studies needed to be:
Published in English between 1950 and 2014.
Peer-reviewed journal articles reporting factors that may contribute to suicide in rural men aged more than 65 years.

5.4 Results and analysis

A total of 82 articles were initially identified. After exclusion of duplicates ($n=22$) and articles that did not meet the inclusion criteria ($n=44$), 16 articles were selected for analysis and inclusion in the review (Table 2). Study findings were synthesised, using the Critical Appraisal Skills Program (CASP, 2015). Key factors contributing to suicide in older males were identified from the articles and categorised by the authors (KCG and LW). Categories were organised conceptually, based on context, and included the role of age and gender, stigma of mental illness, availability of mental health services, socioeconomic status (financial adversity), isolation and changes to rural climate patterns. These categories are presented individually and in context, with other categories where they overlap and intersect.

5.5 Literature review

5.5.1 Age and gender

Advancing age is a risk factor for suicide, because many older males cope less well with physical illness and loss of ability and social connections, because of the ageing process (Page & Fragar, 2002), particularly those who are unmarried or have lost a partner (McPhedran & De Leo, 2013; Handley et al., 2013). Ageing migrant males are at higher risk of suicide, possibly because of limited education and employment opportunities, as they age in rural settings (Alston, 2012). Page and Fragar's national review of Australian suicides over a 10-year period showed that 48.5% of completed suicides in rural areas were by farm managers aged 55 years and older, with most deaths completed by use of firearms, followed by exhaust gas and hanging (Page & Fragar, 2002). De Leo and colleagues' (De Leo, Dwyer, Firman, Neulinger, 2003) research on the substitution of suicide by firearm with suicide by hanging demonstrates a decrease in the use of firearms in Australia, although Klieve and colleagues' report in 2008 revealed that older males still preferred to use firearms to end their life with younger males choosing the method of hanging (Klieve, Barnes, De Leo, 2008). This was also reiterated by Milner and colleagues review of suicide by occupation, stating that farmers were more likely to take their lives by firearm (Milner, Spittal, Pirkis & LaMontagne, 2013).

Guiney's study published in 2012, following the drought in the state of Victoria of 2001-2007, showed 20% of suicides were in men more than 60 years of age (Guiney, 2012). Guiney's study of males working in rural Australia highlights the gender imbalance in rates of suicide, the deteriorating health of older rural farmers, the high rate of male suicide generally, the changing dynamics in farming relationships, and the reduced sense of self-worth and feelings of 'entrapment' (Alston, 2012), because of growing levels of debt and increased poverty for those older male farmers (Alston, 2012).

Highlighting similar stressors in rural Australia, Judd, Cooper, Fraser and Davis. (2006a) discuss the high rates of suicide for males, with a focus on the longitudinal research conducted by Page and Fragar, who highlighted the issue of farm managers being placed in a high-risk category for suicide (Page & Fragar, 2002). This is a result of a combination of geographical location; physical injury; psychological, emotional and financial stress; and the importance placed on feelings of place (Judd, et al., 2006b).

Author/title	Year	Target population	Study type	Main factors associated with suicide	Limitations/findings
Renwick M, Olsen G, Tyrrell M. Suicide in rural New South Wales: comparison with metropolitan experience	1982	53/376 coronial inquests in New England, New South Wales, from 1976 to 1978	Retrospective cross-sectional analysis	Age Gender (male) Skilled worker with access to rifle Married with a history of psychological distress Alcohol consumption Season of spring Recently faced personal loss	Small numbers Although suicides were higher in males between 50 and 64 years, female suicides were higher in all other age groups Need for continuous data collection to ascertain a better picture of suicide
Page AN, Fragar LJ. Suicide in Australian farming, 1988–1997	2002	921 suicides in farm managers and agricultural workers	Descriptive and linear regression of mortality data between 1988 and 1997	Access to methods of suicide Decline in rural economy Social isolation Financial problems Legislative pressures Intergenerational conflict	Majority (48.5%) of farm manager suicides were in those aged ≥65 years Firearms most likely method Exhaust gas and hanging
De Leo D, Dwyer J, Firman D, Neulinger K. Trends in hanging and firearm suicide rates in Australia: substitution of method	2003	Suicides between 1975 and 1998 by International Classification of Diseases code	Retrospective audit of method of suicide	Access to methods of suicide	Older men less likely to use hanging as a method of suicide More likely to use firearms
Judd F, Jackson H, Fraser C, Murray G, Robins G, Komiti A. Understanding suicide in Australian farmers	2006	32 farmers in rural Victoria (16 male, 16 female) 351 farmers, 380 non-farmers	Qualitative interviews Quantitative survey	Financial difficulties Intergenerational conflict Workload Isolation Decision making and responsibility Conscientiousness high	Small number of older males Fast progression through suicide process in rural males
Caldwell TM, Jorm AF, Dear KB. Suicide and mental health in rural, remote and metropolitan areas in Australia	2004	All suicides 1997–2000 by Rural, Remote and Metropolitan Areas Classification 10 641 survey respondents	Retrospective cross-sectional analysis of national mortality data 1997–2000 and national wellbeing survey 1997	Poor access to professional help	Male suicide highest in rural areas Men aged ≥65 years at risk Small numbers of rural participants
Judd F, Cooper A-M, Fraser C, Davis J. Rural suicide – people or place effects?	2006	Not age specific, but focused on rural communities and suicide	Review article of rural suicide contributors	Social status Age (older is more likely to suicide) Sickness Unemployment/financial stress Access to means of suicide	Not specific to older males but does mention some factors relevant to this group
Qi X, Tong S, Hu W. Preliminary spatiotemporal analysis of the association between socio-environmental factors and suicide	2009	2445 suicide deaths between 1999 and 2003 in Queensland, data from Australian Bureau of Statistics. 288 (12%) aged ≥65 years	Retrospective analysis	Lack of available services Rurality Low socioeconomic status	Males accounted for 80% of deaths Small retrospective sample
Gunn KM, Kettler LJ, Skaczowski GLA, Turnbull DA. Farmers' stress and coping in a time of drought	2012	309 drought-affected farmers and spouses 12% of sample aged ≥65 years	Cross-sectional study	Very high levels of distress in those aged ≥65 years could contribute to suicide	Small sample size Older men less likely to use alcohol than younger men
Guiney R. Farming suicides during the Victorian drought: 2001–2007	2012	Farmer or primary producer deaths in Victoria between 2001 and 2007 (110 deaths)	Retrospective analysis	Multiple psychological factors Social factors Environmental and economic factors	20% of deaths were in those aged >60 years No increase in farmer suicides in the timeframe
Handley T, Inder K, Kay-Lambkin F, Stain H, Fitzgerald M, Lewin T, Attia JR, Kelly BJ. Contributors to suicidality in rural communities: beyond the effects of depression	2012	618 participants in the Australian Rural Mental Health study 150 males aged ≥65 years	Cross-sectional study	Aged ≥65 years and married were less likely to attempt suicide	Small sample size Found depression and suicide were separate constructs
Handley TE, Inder KJ, Kelly BJ, Attia JR, Lewin TJ, Fitzgerald MH, et al. You've got to have friends: the predictive value of social integration and support in suicidal ideation among rural communities	2012	1356 participants in the Australian Rural Mental Health Study 39% male	Longitudinal study	Lower perceived social support Less community engagement Lower sense of belonging High distress about rural infrastructure	Small numbers aged >65 years
Cheung YTD, Spittal MJ, Pirkis J, Yip PSF. Spatial analysis of suicide mortality in Australia: investigation of metropolitan–rural–remote differentials of suicide risk across states/territories	2012	10 616 suicide cases from National Coronial Database both urban and rural, male and female	Retrospective analysis	Socioeconomic deprivation Employment Reduced agricultural productivity due to climate events (drought, floods)	Rural areas have higher suicide risk, significantly higher in men.
Aiston M. Rural male suicide in Australia	2012	30 articles ranging from 1987 to 2008, including research conducted by author between 2004 and 2009	Review article of rural suicide in farming families	High levels of social isolation Ease of access to firearms Lower socioeconomic status Climate change Changing gender relations Genre of masculinity leading to stoicism	Women needing to work off farm (80% of work is being done by women) Misunderstanding of older males and roles of women Issues of older males being unsuccessful farmers, relating to their understanding of being male Communities of <4000 people
McPhedran S, De Leo D. Miseries suffered, unvoiced, unknown? communication of suicidal intent by men in 'rural' Queensland, Australia	2013	3203 coronial records of deceased men aged ≥18 years in rural (44%) or urban (54%) locations in Queensland	Retrospective audit of suicide deaths between 1990 and 2008	Rural location was associated with higher communication of intent to die by suicide, without any formal help from health professionals Financial stress Relationship breakdown	Small number aged ≥65 years
Inder KJ, Handley TE, Johnston A, Weaver N, Coleman C, Lewin TJ, et al. Determinants of suicidal ideation and suicide attempts: parallel cross-sectional analyses examining geographical location	2014	8463 Australian residents in 2007 National Study of Mental Health and Wellbeing and 634 Australian Rural Mental Health Study (rural and remote participants)	Cross-sectional study	Isolation Geographic remoteness Psychiatric distress Financial hardship Personality	Being married reduces suicide risk in older men
Handley TE, Attia JR, Inder KJ, Kay-Lambkin FJ, Barker D, Lewin TJ, Kelly BJ. Longitudinal course and predictors of suicidal ideation in a rural community sample	2013	2135 participants in the Australian Rural Mental Health Study self-reported their psychological and social wellbeing over a 3-year period (baseline, 12 months and 36 months)	Longitudinal analysis	Suicidal ideation was found to be associated with psychological distress, lack of social support and employment status Neuroticism Lack of belonging to community	Use of Patient Health Questionnaire 9 (only records suicidal ideation over a 2-week period) Measured thoughts of suicide, not suicidal behaviours

Table 2: Literature included in Review

5.5.2 *Stigma of mental illness and availability of mental health services*

The unwillingness of people to discuss mental illness is evident in the reviewed articles, with one paper by Judd, Jackson, Fraser, Murray, Robins, Komiti (2006b) discussing the preference to talk to professionals about practical things, such as seeking financial assistance, rather than discussing mental health. The stigma of mental illness was identified as a factor that prevented older rural males asking for assistance when they felt unable to cope with their daily life and responsibilities (Judd et al., 2006a, 2006b; Alston, 2012; Guiney, 2012; Handley et al., 2013; McPhedran & De Leo, 2013). Similarly, other studies reported the reluctance of older rural men to report feelings of stress and anxiety to their local doctor/general practitioner (GP) (Caldwell et al., 2004; Judd et al., 2006a; Guiney, 2012), with Rajkumar and Hoolahan's study on the experiences of isolation in rural Australia reporting the low use of mental health and GP services generally (Rajkumar & Hoolahan, 2004). Guiney's study of rural farmer's highlights discussions pertaining to family pride, personal and family values and a high turnover of medical professionals as just some of the reasons why people do not connect with their local health services (Humphreys, Jones, Jones, Hugo, Bamford, Taylor, 2001; Guiney, 2012). These factors reduce the likelihood of diagnosis and treatment for mental health issues.

Although initiatives have been implemented to assist the mental health of older rural men (Dudley et al., 2009; Department of Health, 2008, 2016) there are still areas where services are limited or not available. Judd and colleagues (Judd et al., 2006a, 2006b) suggest this may relate to a reduction in rural health services generally, with rural communities facing increased levels of out-migration and decreased population mass (a result of younger residents leaving rural areas to attend tertiary educational facilities and improve their chances of employment). The study conducted by Qi et al., (Qi, Tong & Hu, 2009) looking at socio-environmental factors and suicide, found that areas with high suicide rates also had higher populations of Aboriginal and Torres Strait Islander people, who are known to have high suicide rates, poorer access to mental health services and lower socioeconomic status (Hunter & Milroy, 2006).

5.5.3 Socioeconomic status, unemployment, and financial adversity

Research conducted into social integration and friendship by Handley and colleagues suggests that unemployment is also predictive of socioeconomic status (Handley, Inder, Kelly, Attia, Lewin, Fitzgerald, et al., 2012). A study conducted in 2012 by Inder and colleagues reviewing reasons for suicidal behaviour, suggests that the presence of a psychiatric disorder, marital status, use of mental health services and a person's perception of financial viability can contribute to suicidal behaviours (Inder, Handley, Johnston, Weaver, Coleman, Lewin, et al., 2014). Renwick Olsen and Tyrrell compared suicide in both rural and metropolitan areas, in order to highlight the inequity between rural and urban income levels, with rural residents earning far less than urban dwellers (Renwick, Olsen & Tyrrell, 1982). Prolonged or unforced unemployment in a rural or remote location may impact negatively on an individual's social capital and this may impact upon already compromised levels of psychological distress, leading to an increase in suicide risk (Inder et al., 2014; Taylor, Page, Morrell, Harrison & Carter, 2005; Gunn, Kettler, Skaczkowski, Turnbull, 2012). Other studies suggest that having to leave the family farm, either through forced or unforced means, results in an increased risk of suicide (Caldwell et al., 2004; Judd et al., 2006a; Alston, 2012; Guiney, 2012).

Major factors associated with an increase in psychological stress and subsequent risks of suicide in older rural men were issues with farm ownership, and about who will inherit the family farm (Caldwell et al., 2004; Judd et al., 2006a; Alston, 2012; Guiney, 2012). Three studies found that when younger generations leave the farm, the burden of debt usually stays with the older generation, who are unable to leave the farm, and often unable to make a profit from it (Judd et al., 2006a; Alston, 2012; Guiney, 2012). Some studies identified economic (global agricultural export) and government regulatory factors (such as workplace injury laws) that place farmers under increased pressure, resulting in anxiety, and sometimes post-traumatic stress disorder, following workplace injury (Judd et al., 2006b; Alston, 2012; Handley, Inder, Kay-Lambkin, Stain, Fitzgerald, Lewin, et al., 2012). Three studies (Judd et al., 2006a; Alston, 2012; Gunn et al., 2012) highlight the stoic, hardworking persona of the Australian

farmer, and the feelings of failure and disappointment when family farms fail or financial situations seem unresolvable.

5.5.4 Isolation

Rajkumar and Hoolahan identified geographic isolation, loss of social capital and increased psychological distress were factors, working together or separately, in not accessing local medical services (Rajkumar & Hoolahan, 2004), and in higher recorded rates of suicide in rural areas (Renwick et al., 1982; Gunn et al., 2012; Taylor et al., 2005; Handley et al., 2012; Cheung, Spittal, Pirkis, Yip, 2012). Research conducted by Taylor and colleagues highlighted isolation in some rural and remote communities as a reason why rural residents are not easily rescued or saved from a suicide attempt (Taylor et al., 2005). Qi and colleagues (2009) discuss the greater the distance from a GP trained in recognising mental illness, the greater the risk of suicidal behaviours in older rural males. With specific reference to isolation in rural areas, there is evidence to suggest that the greater the distance from urban areas, coupled with access to means could go some way to help explain the higher rate of suicide in older rural males (De Leo, Dwyer, Firman & Neulinger, 2003; Judd, Cooper, Fraser & Davis, 2006a; Hazell, Dalton, Caton & Perkins, 2017; Bishop, Ransom, Laverty, & Gale, 2017; Kunde, Kolves, Kelly, Reddy & De Leo, 2018).

5.5.5 Changes to the rural environment

In the years between 2001 and 2007, Victoria experienced one of its worst weather events, a drought lasting 6 years, which caused high levels of stress for the local drought-affected areas. Both Guiney and Alston discussed the relationship between changing climate patterns (particularly drought) and increased risk of suicide, in older rural men, about recovery from extreme weather events (Alston, 2012; Guiney, 2012). Five other articles highlighted that the changing rural environment was considered a major factor contributing to suicide risk, with changes to agricultural practices, reduced services, increased debt, reduced land values, decreased ability to find work and changing social support networks all playing a part in increased levels of psychological distress (Alston, 2012; McPhedran & De Leo, 2013; Judd et al., 2006b; Gunn et al., 2012; Handley et al., 2012).

5.6 Discussion

The key finding of this review is that, for an older male in a rapidly changing rural environment, where financial adversity is increasing and social cohesion diminishing, likelihood of psychological distress and subsequent risk of suicide increases. The literature reviewed clearly shows that older males are hesitant to access mental health programs, due to the stigma of mental illness, a lack of awareness of the benefits of mental health services, or an inability to access services due to geographic isolation. Farmers are less likely to access mental health services due to the stigma of mental illness, high workloads and lack of access, either perceived or real. In addition, farmers in live-work situations have an increased level of stress, with weekends viewed as another work day, and increased psychological pressure of ongoing work and family commitments. Increasing levels of environmental change are major contributors to an increased risk of suicide in this group. Factors outside the control of the rural male resident (such as global economics, climate events, societal change and financial adversity) may compound, leading to high levels of psychological distress and an increased risk of suicide (Gunn et al., 2012).

Much of the literature review commented on the connection of the farmer to the land, and the sense of place and connection to the rural way of life (Judd et al., 2006a; Alston, 2012; Judd et al., 2006b). These findings reflect other rural Australian studies that highlight the strong connection of rural residents to their land and community (Fraser, Smith, Judd, Humphreys, Fragar, Henderson, 2005; Ng, Wilson & Veitch, 2015). Hence, changes to the rural economy, a decrease in productive farms by 25% in the last 25 years and globalisation of agricultural product export have placed pressure on farmers to expand and carry large debts. When younger generations leave the farm, the burden of debt usually stays with the older generation, who feel trapped and unable to sell, but are also facing low profits and yields. Farmers who are forced to sell stock at extremely low prices or kill animals because they are unable to afford to feed them, because of climatic events, are at high risk of psychological illness and suicide.

Despite programs targeting the mental health of rural men, there is still a stigma attached to being diagnosed with a mental illness or displaying an inability to cope. Research suggests that rural males personalise their own experience (such as feeling a sense of responsibility for failed crops), limiting their ability to understand the broader

impact of changing weather patterns, and the way this affects others similarly. The perception that the persona of Australian rural men is hardworking, stoic and indestructible may lead this group to feel that the success of the farm is attached to their masculinity (Alston, 2012). In addition, the increasing requirement for women to work in other paid positions away from the farm has been identified as causing feelings of inadequacy, and therefore psychological distress, in older males. In addition, the increasing unpredictability of climate patterns leading to long periods of drought and/or unseasonal flooding have had an impact on the psychological state of rural communities (Guiney, 2012; Judd et al., 2006a; Hanigan, Butler, Kokic, Hutchinson, 2012).

Some subgroups within the older male rural cohort have particularly high levels of suicide. These are older migrants and Indigenous and Torres Strait Islander populations. High levels of suicide in rural migrants could be due to a lack of access to education and poor English, coupled with the hardworking, stoic nature of many migrant families, who are determined and accustomed to living with adversity (Shah & Bhat, 2009). Indigenous and Torres Strait Islander communities have a 20% lower life expectancy than non-Indigenous communities, with higher unemployment rates and lower socioeconomic status. These disparities are exacerbated in rural and particularly remote areas and can impact on later suicide risk (Law, Snider, & De Leo, 2014).

The unique vulnerability relating to factors for older age cohorts in rural areas, relating to socioeconomic factors such as isolation, physical comorbidity, health service access and lack of resources, can be interpreted in the context of the Vulnerable Persons Conceptual Framework, developed by Flaskerud and Winslow (Flaskerud & Winslow, 1998). This framework was used to try to interpret the themes that emerged from the literature. The Vulnerable Persons Framework has three dimensions relating to relative risk, health status and resource availability.

Commonly, in epidemiological research, relative risk relates to the risk of association between strength of exposure to a disease and the outcome of disease. In this instance, relative risk applies to a population with regards to the relationship between increased risks of illness, due to lack of resources and decreased health status. Ideally speaking, the greater the access to resources, the better the health status will be, leading to a general decrease in risk of comorbidities in vulnerable people (Flaskerud &

Winslow, 2010). Health status indicators, using a vulnerable person's framework, can be defined as levels of morbidity and mortality (Leight, 2004), while resource availability relates to the amount of community resources available to the community, to improve their overall health.

The research included in the present article makes recommendations for increasing current strategies, with a view to the development of future strategies to assist rural people who may be experiencing suicidal behaviours. These include increased identification of people at risk through screening (Handley et al., 2012), increased clinical and tele-psychiatry services to assist rural GPs caring for rural people at risk (Rajkumar and Hoolahan, 2004) and further research into suicide risk factors, comparisons with other male-dominated occupations. Along with further examination of the incidence of farming suicides, these may provide a more complete picture of the complexities of older male suicide in rural Australia (Guiney, 2012; Law et al., 2014). Kennedy (Kennedy et al., 2014) suggest there needs to be more discussion and research into the impact of suicide on communities, and an understanding of the specific needs of farming communities, both in the local and regional sense. In view of the high suicide rate in older rural males, compared to urban males, Shah and Bhat (2009) suggest there is a need for further research into the risks and protective factors for older men. There is a suggestion that the experience of adversity can protect some people from suicidal behaviours (Shah & Bhat, 2009). This is supported by other research in rural communities that highlights the role of protective factors in preventing high levels of stress, building resilience and successful adaptations (Guiney, 2012). Coping mechanisms such as the collective resource of social capital, the camaraderie found in rural communities and the shared experience, may be an area of research to investigate further. Such research can then drive changes to existing policies and suicide prevention programs.

There were two obvious gaps discovered in the existing research on suicide in older rural men. The first is the reluctance of researchers to explore the possible misclassification of suicide deaths (i.e. deaths classified as accidents, which may, in fact, be suicide), with only one article, by De Leo (2007) discussing the importance of recording appropriate suicide mortality data. With this at the forefront, it is likely that stigma around suicide, and issues relating to insurance claims, following the death of an

older male, may be associated with underreporting of suicide deaths (Kennedy et al., 2014). The second finding is that of the paucity of research, giving regard to the impact of retirement, overall mental wellbeing and suicidal behaviour on older rural males.

5.7 Conclusions

This article reviewed the literature outlining the potential contributing factors to suicide in elderly Australian rural dwelling males. The literature highlights the impact of the changing rural economy and the differing dynamics of contemporary rural families. In this setting, ageing rural men are exposed to several issues that compound the risk of suicide, compared to older men living in urban Australia. Those who are farmers are burdened with the rising financial cost of maintaining increasingly large farms to ensure financial return, whilst dealing with unpredictable climatic conditions. The burden of financial adversity and the stress of losing farms that have been in families for generations are key factors impacting on the mental health of farmers. Similarly, rural men who have a long history working in service industries (such as farm fencing, shearing, and agricultural supplies) are also affected by the downturn in the rural economy. Future research should focus on the effect that retirement may have on an individual's physical and mental wellbeing. These areas could include: suicidal behaviours; improved suicide prevention strategies and increased understanding of suicidal behaviours, identification of possible misclassification of suicide death and further investigation into retirement pathways, particularly in rural areas.

Chapter 6: Navigating the feelings of retirement

6.1 About this paper

This chapter presents the results of the first phase of a phenomenological study, investigating the voices of older rural Australians. This chapter focuses on the unexpected aspects of the retirement experience for older rural dwelling adults in New South Wales, Australia. This paper was been submitted in the Journal of Rural and Remote Health as “*Navigating the feelings of retirement in rural Australia*”. (Under Review).

Authorship

We agree that this is a true and accurate record of our contribution to this paper.

Concept

Crnek-Georgeson, K.T Date.....

Wilson, L. A..... Date.....

Data Analysis

Crnek-Georgeson, K.T.....Date.....

Paper development and Preparation

Crnek-Georgeson, K.T.....Date.....

Wilson, L. A..... Date.....

6.2 Introduction

There is a large body of research investigating social and global issues in rural retirement (Downey, Threlkeld & Warburton, 2017; Pit & Hansen, 2014; Winterton and Warburton, 2012). In Australia, rurality has many definitions, and no real consensus on which is “best”. Some are based on the size of the community, others on being outside of a major populated area (AIHW, 2020) others on the distance to services one of which is defined as “anywhere outside an urban/other urban area, with a population of less than 100,000” (ABS, 2019), with 29% of the population (approximately 7 million people) living in rural or remote areas (AIHW, 2018a).

Research conducted on Retirement and Retirement Intentions (ABS, 2015), found that 19% of males and 14% of females retired early due to ill health, with an additional nine percent of men and five percent of women leaving the workforce because they were retrenched, dismissed or there was no work available (ABS, 2017). Statistics from the 2016 Retirement and Retirement Intentions Report (part of the Multipurpose Household Survey) show an increase in males retiring due to ill health in the five-year period since the previous survey (19 % vs 21%) although, conversely, numbers for women retiring due to ill health decreased during this period (14% to 12%) (ABS, 2017). The 2016 population census showed that men who left work because of retrenchment, dismissal or lack of work available decreased from nine percent to seven percent, whereas there were no changes in the percentages of women who left work for these reasons (5%) (ABS, 2017).

Australian studies investigating the transition from employment to retirement suggest that unplanned or involuntary retirement is associated with poorer mental health and wellbeing (Myles et al., 2017; Gong & Kendig, 2017; Moffatt and Heaven, 2017; Qi, Hu, Page & Tong, 2014; Vo et al., 2014). Many people who are ageing experience a deterioration in physical capacity (including mobility, vision and hearing). A link between good quality of life and appropriate diagnosis of conditions of ageing is critical in managing an older population (Rooth, 2017). A deterioration in capacity to enjoy life, may lead older people to consider whether life is worth living, and, with research stating that suicide rates increase with age (Shah and De, 2009; Shah, 2011), in spite of controlled measures such as decreased functioning, monitoring of depression and feelings of hopelessness (Cukrowicz, Cheavens, Van Orden, Ragain & Cook, 2011), this

study investigates a possible link between retirement and deteriorated physical and/or psychological wellbeing.

In 2014, the Australian Government changed legislation pertaining to the access of retirement benefits. This may have the potential to increase the rate of psychological and/ or physical distress in Australians preparing for retirement. With the introduction of the new policy, the age at which Australian men and women can access aged care retirement benefits, will rise incrementally to 70 years by 2035 (Parliament of Australia, 2014). Research conducted by the Australian Council on The Ageing (COTA) suggest that those retiring or considering retirement are concerned about delayed access to the Aged Pension. This is particularly so for those working in industries with high levels of physical activity (such as agriculture), as extended work in these occupations may contribute to a decrease in overall health (Council on the Ageing, 2018).

There are many factors when retiring from a rural occupation that may lead to fatal and non-fatal suicidal behaviour (suicide ideation, suicide plan or suicide attempt), (Nock, Borges, Bromet, Cha, Kessler, & Lee, 2008) (hereafter referred to as ‘suicidal behaviour’). These factors include but are not limited to; intergenerational conflict, isolation, changing climate, fluctuating finances, relationship breakdown and the psychological stressors of rural living (physical work, isolation, family conflict and drought) (Kunde, Kölves, Kelly, Reddy & De Leo, 2018; Rogers, Barr, Callaghan, Brumby & Warburton, 2013). Poorer mental health in some older rural residents can be attributed to transgenerational issues regarding farm ownership, deeply rooted levels of identity, and a desire to stay on the farm, despite deteriorating health (Rogers, Barr, O’Callaghan, Brumby, & Warburton, 2013). Anecdotally, there is a perception that farmers don’t retire, whereas this research demonstrates that they do retire on the farm, or move into town “off farm” for financial and/or health reasons.

This study investigated the lived experience of rural Australians who were retired or considering retirement. The study focussed on; 1) the impact retirement had on physical and mental wellbeing, 2) whether there was a link between retirement and suicidal behaviour, 3) whether there was any difference in the expectations of retirement (i.e. the reality vs the expectations) and 4) the experiences adjusting to retirement.

6.3 Methods

A phenomenological approach was used to gain insight into the lived experience of older rural Australians who were retired or considering retirement. Literature suggests that rural communities can be distrustful of researchers from outside their community and may be reluctant to share information in front of other locals (Robinson, Burley, McGrail, Drysdale, Jones & Rickard, 2005). For this reason, options were provided for participants to undertake individual interviews or focus groups.

6.3.1 Recruitment

Between September 2017 and May 2018 rural Australians aged over 45 years were invited to participate in interviews (telephone, face to face) or focus groups. Participants were recruited using local community health networks, newspapers and advertisements on local radio. Eligibility criteria included: aged 45 years or older (in order to encapsulate those who had been retrenched or retired early due to illness or injury) a rural NSW resident, as defined by the Australian Bureau of Statistics (ABS, 2019), and identify as either 1) an individual who had lived experience of previous (non-fatal) suicidal behaviour in the previous 5 years; or 2) an individual with no lived experience of suicidal behaviour in the previous 5 years. The decision was made to interview both groups, to identify any protective behaviours relating to the participant's transition into retirement, and to ascertain whether retirement had an impact on physical or psychological wellbeing. After considerable discussion and research into this sensitive topic, the researchers chose the time limit of 5 years to encapsulate the phenomenon of lived experience of suicide (CRRMH, 2017; National Rural Health Alliance, 2015; Kennedy, Maple, McKay and Brumby, 2014; Life in Mind, 2020) within the contemporary context of rural retirement (Downey, Threlkeld & Warburton, 2017; Pit & Hansen, 2014; Winterton & Warburton, 2012).

Participants were provided with a Study Information Sheet and all provided Informed Consent, including consent for interviews and focus groups to be audio-recorded. A semi-structured interview guide (Peavey, 2000) was used to develop an interview schedule exploring; retirement transition, feelings about retirement, the reality and expectations of retirement and the impact of retirement on physical and mental wellbeing. The study was approved by the local Human Research Ethics Committee (Protocol Number: H12022).

6.3.2 Analysis

Interview data were transcribed verbatim and entered an excel spreadsheet (Microsoft, 2017). Participants' data were de-identified for the purposes of reporting. Using an iterative process of review (Horsfall & Pinn, 2009), both researchers reviewed, and re-reviewed transcribed text and after discussions and agreed consensus, coded data into key themes and sub-themes. Recurring words and phrases were used to identify key themes and sub-themes (Figure 7).

6.4 Results

Three (3) women and 15 men were recruited into the study (n=18). Seven interviews (five face to face and two by telephone) and two focus groups (five and six participants respectively) were conducted. At the time of interview, 13 participants were retired, two were semi-retired and three were looking for work. The average age of participants was 66 years (range 54 – 82 years). Those who were retired or semi-retired had been retired for at least two years (range 2 – 20). One third of the participants had retired voluntarily, with the remainder stating that they had not been involved in their decision to retire/or to leave the workforce.

Table 3 List of demographics of rural participants.

Age	Sex	No. in Household	Retired	Voluntary?	How long	Working	Medications
66	F	3	Yes	No	5 months	No	Yes
63	M	2	Yes	Yes	60 months	No	No
63	M	1	Yes	No	22 months	No	Yes
57	M	y	Yes	Yes	144 months	No	n/a
76	M		Yes	Yes	180	No	Yes
68	M	1	Semi-Retired	No	24	Yes	n/a
65	M	1	Yes	Yes	24	No	No
66	M	1	Yes	Yes	84	No	n/a
60	F	2	No	No	0	No	Yes
65	F	5	Yes	No	15 months	No	No
66	M	2	Yes	Yes	12 months	Semi-Retired	No
70	M	2	No	No	60 months	No	Yes
64	M	1	Semi - Retired	No	Semi-Retired	Semi-Retired	No
66	M	3	Yes	No	24	No	Yes
60	M	1	Yes	No	24	Yes	n/a
82	M	1	Yes	Yes	Unknown	No	n/a
54	M	2	YES	No	120	No	n/a
72	M	Unknown	yes	Yes	48	No	n/a

Eight participants identified themselves in the ‘lived experience of suicide’ group, and ten in the ‘non-lived experience of suicide’ group. All participants commented that they had been exposed to suicide through family or friends. All participants were aware of the effect of retirement on their state of mental health, discussing links between social isolation and depression and how this had the potential to lead to suicide. Four key themes (Identity, Loss, Planning and Resilience) emerged from the data with several sub-themes emerging from each key theme (Figure 7).



Figure 7: Relationship between themes identified by participants

6.4.1 Key Theme 1: Identity

Identity was a key theme emerging from the interviews and the sense of identity was strong in all participants. The role of identity was linked to being a rural Australian, either male or female, current/ past work life and the experiences of transitioning into retirement. Many commented on the need to develop a ‘new identity’ post retirement because of what they felt was a situational identity that had been forced upon them.

6.4.1.1 Rural identity

Most participants commented on their “rural” identity and how important the ‘bush’ was in forming this identity. Some participants commented on the additional level of resilience acquired from living in a rural area, and related this strongly to their working persona;

“I think that had I not been a kid from the bush and had that sort of resilience, I would probably have gone into a nursing home and died 5, 10, 15 years ago, not 15, yeah 5 or 10 years ago”. (Male Aged 66)

6.4.1.2 Gender identity

The lived experience of retirement was different some of the women in the study, with comments of felt disadvantage, compared to their male counterparts. This was due to minimal superannuation savings, declining overall health, and social isolation. All the female participants had been retrenched, with two still actively looking for work.

“I have also just learnt that I’ve got osteoporosis. So, that stopped me in my tracks for a while and thinking about how to maximize my health and what does that mean planning for the future, I would anticipate that I want to continue working full-time for some more years” (Female Aged 60)

Gender was also a factor in the lived experience of suicide for one female participant, exposure to suicidal behaviour seemed to numb the effects of the loss, commenting that after her nephew died by suicide, she had a feeling of ‘permission’ to die by suicide. This participant commented that she had attempted to take her own

life previously and having a close relative take his own life, gave her permission to attempt to take her own life again:

“When he took his own life, it planted the seed that it seemed okay to do it”

(Female Aged 65)

This contrasted with the view of one of the male participants whose nephew had also died by suicide. He stated that he was very confused as to why a person would take his or her own life:

“We thought, what is happening to these young men, late 20’s, early 30’s, who have decided that life is not worth living. I just couldn’t, I find it hard to believe you would do it”

(Male Aged 63)

6.4.1.3 Work Life identity

Working life contributed significantly to a persons’ identity. Participants commented on feeling sad at lack of connectedness with previous work colleagues, and how moving in different circles contributed to a loss of identity. Similarly, making the decision to move out of the area for lifestyle change or declining health also contributed to a loss of identity and isolation. One participant who moved from a farm to a town property commented on the reaction of others in town when he discussed the farm and how this contributed to a sense of isolation and loss.

“You should let go of your property. It’s not important anymore”

“They assume that you are just going to move into town and start this whole other life – we have still got that connection to the land”. (Male Aged 70)

Working life was very closely linked to working identity and many felt proud of what they had achieved in their careers. The absence of the ‘working identity’ contributed to feelings of loss of purpose, creating a desire for a new identity to be formed:

Another participant reported being greatly surprised that upon retirement he found himself living alone in a rural area, after having lived most of his life in the city. He noticed that his anxiety levels had increased, without any previous history of mental illness:

“I moved into an apartment by myself and I realised once the initial euphoria of retirement had finished, and there was no need to get up at 5 to catch the 6 o’clock train, I basically had no social life, my friends were in (the city). They would visit for the weekend, but from Monday to Friday it was just me, all by myself. And that became quite challenging and I knew I was drifting Social isolation. Unless someone was selling me a schooner, or handing me money at the checkout there was no interaction at all with humanity... And I realised that I had to take some proactive steps to start interacting with people”.

(Male Aged 65)

6.4.1.4 A new identity

Several participants expressed this desire to develop a ‘new identity’ or keep connected with their rural identity because of the loss and disconnectedness with their previous work identity.

“Often they have had to move into town into a unit or something because they can’t maintain the farm. It’s the whole changing identity and making an identity. And I just think that we can do more to our ageing Australians that have contributed so much to the generous lifestyle that we enjoy”

(Female Aged 65)

One participant referred to the need to “build his personal life” again after being diagnosed with Post Traumatic Stress Disorder (PTSD) and having experienced suicidal behaviours after a traumatic experience. He commented on knowing of PTSD through friends in the community who had served in the war and likened his own symptoms with those of his friends in the services:

“About a year, year and a half ago, I started building my personal life.... My experience of PTSD is very different to others who have I known in my community who have served in the war, but I experience similar symptoms. Through the period of trauma and suicidality, I was undoubtedly quite withdrawn, deliberately so. I didn’t feel like I was a happy person or wanting to go out and make friends. I felt a little bit threatened... It got to a point,

where I sort of had a chat with myself, decided that this isn't really very good, and I had become very withdrawn and to some extent, shy, and I sort of decided that I needed to go and do things to change it. Once one thing happened, that led to other things, it snowballed from there. I said to myself I don't really want to live like this, draw the line, close the chapter. I know where I live, it is a special community, it is time to start to take risks.

(Male Age not disclosed)

Another participant commented on a well-planned retirement after working for the same company for over 40 years. Although once retired, and now newly single, he was feeling even more isolated in retirement, although he also reported experiencing worries about receiving a large lump sum of income, despite having had financial counselling. He reported this as being very worrisome and causing him a great deal of anxiety.

"It should have been a simple question, but when I retired I thought, well I had better not do too much because there could be a big tax thing coming out – but it never occurred, but, to me, it was a big worry. It was in my own head, even two years after retiring"

(Male Age 66)

He revealed the positive aspect of his situation was that his newly found group of friends were helping him to re-establish his new identity as a single retired male, helping with achieving goals and being able to go home.

"I didn't think I was that old. All of a sudden, I was told after 40 plus years, "Oh, you can retire now". So, I was a bit lost there for a while. I delayed it a little bit then retired. I thought I had everything planned, life was sorted. Then, the wife decided. "See ya later". I thought I was going to be traveling around the country with my wife, enjoying life, but that sort of changed and I had to find other ways of entertaining myself (recreational activities). I made it sort of like an appointment for my own good. I had had enough, but I never missed work. I am happy to go on with what I am doing. From that point of view, I am still pretty happy. I have a new partner now. I was getting to the point where I was very lonely. That has made a big difference.

(Male Age 66)

6.4.2 Key Theme 2: Loss

The theme of loss had many subthemes including; loss of identity, loss of contact with others, loss of spouse, loss of physical and/or mental health, lifestyle deterioration, loss of income relating to individual choice and quality of life, and loss of the family home/farm. Loss was also linked very closely to identity, as well as finances, health, lifestyle and changing social circles. One surprising theme, for the participants, was their resilience with regards to experiences of declining health, loss of income, and understanding of what had happened to them after leaving work.

6.4.2.1 Loss of identity, colleagues and friends

Upon returning to the health system as a consumer, instead of a worker, one participant felt a lack of identity and isolation from the staff that she had worked alongside for over 30 years

“Yeah, I’ve known them for many years and know their system. ...” I don’t expect them to fall all over me but I’m not a member of that team”

(Female Aged 65)

“Maybe once you leave, it’s harder to maintain friendships with women if you are not friends with the husband? That sort of thing. Maybe that’s an issue?”

(Male Aged 63)

There were also comments on the perceptions of local farmers who retire, with many stating that they feel they are no longer a resource for the local community and have lost their sense of purpose. This comment was made by a local community worker who had worked in the area for over 30 years, discussing feelings of farmers’ loss of identity, from her own professional perspective.

“) farmers go into town, they’ve got a – they’re a great resource. They borrow this and order that, and whatever, “Hello!” But now, you know – they have had to move into town into a unit or something because they can’t maintain the farm”.

(Female Aged 66)

Participants who had moved to the country to escape the city, commented that the new environment made them feel relaxed, but the loss of connection to friends in the city as well as a loss of their work identity contributed to depression and anxiety.

“I genuinely felt for the older men in the rural communities because they do lose their identity and they lose their sense of purpose getting up every morning and they sort of felt as if they were just on the scrap heap. And I just believe that there should be bigger input and more resources into older mental health patients”.

(Female Aged 65)

6.4.2.2 Loss of income and lifestyle

Loss of income seemed to affect life choices and quality of life in the female participants. One participant describing her feelings of loss and isolation when she could not afford to do the things others did, such as cruising, or taking holidays around Australia.

“It made me feel a bit odd and sort of, um, you know...on the outer...that I didn’t think like normal people think”

(Female Aged 65)

When comparing herself to her other friends from work, she felt that she couldn’t plan for her retirement as she wasn’t expecting to retire for another 5 years

“They were very organised and orderly and had their finances in order. And most of them have partners and they were able to retire and travel and not that I want to travel, but theirs seemed to go a lot easier than mine did. They were happy to retire and not do much, which I found a bit surprising”.

(Female Aged 65)

In contrast, most male participants who had been continuously employed throughout their career, had superannuation funds upon which to rely, although those with chronic health conditions were not able to experience the same level of financial security.

“My decision (to retire) was fairly quick, so I don’t know whether I spent a long time mulling over whether I should retire or not. I think I got to a stage where I had had enough, and I just went and talked to a financial guy”.

(Male Aged 63).

6.4.2.3 Loss of health

Most participants noted that their physical health had declined since leaving work, with the women genuinely surprised at how quickly their health deteriorated in the 5 years prior to retirement (whether planned or unknown). The theme of loss of physical or psychological health post working life, was discussed by all participants.

Some expressed feelings of disconnectedness and irrelevance with some feeling they were treated differently when attempting to access health services upon retirement. Many commented on the effect of retirement on their state of mental health, discussing links between increased social isolation and depression, with the potential to lead to suicide if their retirement trajectory continued its current pathway.

“I was very depressed at that stage and I had thought of suicide. But logically, I said to myself, what would I gain from that? Once you think logically like that you are not going to suicide. I said I would gain absolutely nothing”

(Male Aged 63)

6.4.3 Key theme 3: Planning

Planning arose as a central theme, with many participants discussing the importance of choice and when to start saving or planning for retirement. Start early, and save often, seemed to be a very important concept here. Most felt it was a good idea to plan 10 – 15 prior to retirement.

6.4.3.1 The choice to retire

One of the sub themes related to planning was the option of choice in retirement. Two thirds of the participants commented that they did not have a choice in their retirement plans, with discussions arising as to how this led to accelerated feelings of disempowerment, isolation and physical decline. One participant reflected on her surprise at how her body deteriorated post retirement:

“Yes. I was going to do wonders. I was going to be fit and healthy, and – yeah, it was a bit of a letdown actually ‘cause my health sort of went downhill in several areas and slowed me down a bit and I didn’t realise I’ve always been one – if somebody needed something, I’d go and buy it and give it to them and do it. With my workshops, I go and buy the resources and [deal with it] and I don’t have the money and the resources to do that anymore, things like that sort of – yeah, that I haven’t – just hadn’t thought about. You just assume it’s gonna always be the same, or I have. So, it’s probably financial and then a few health issues – yeah, cropped up as well. Yeah.”

(Female Aged 65)

Male participants recalled feeling that they had a lack of choice in their first jobs; moving off the family farm for further education but still identifying strongly with their rural past. Although they reported being restricted in their early career choices they now exhibited a sense of elation and freedom of choice in their post working life. One of the participants stated that others employed in ‘white collar jobs’ found the transition into retirement more difficult, as opposed to those who had more physically demanding jobs. Another female participant discussed her lack of choice of services, because of her employment being terminated.

“So, I couldn’t access certain services and they put me on sick leave without pay. So, my income had plummeted, and I needed to access the same services that would be accessed by people with zero or very, very low income and I couldn’t find anything”.

(Female Aged 60)

Gender differences were evident when discussions of choice of daily activities arose. Two men expressed feelings of relief, as they were now able to make choices

in their lives and do what they wanted to do – rather than what their employers wanted. This included enrolling in further education and participation in local classes, events and activities. Two of the three women interviewed were actively looking for work, after recently being retrenched from their jobs.

Most of the participants commented on the need to create a plan for the day (farm/ work/volunteering/ hobbies etc.), to help them ease into retirement. Even those who had planned for their retirement, once they had retired, unforeseen events occurred, such as a spouse leaving that caused an increase in psychological distress:

“When they said that I could retire, I said, Oh, thanks very much. I delayed it a little bit, so I could get another increment in my pay before I left, as my final payout was based on pay, um....it was only a couple of months from when I turned 60, um, I thought I had everything planned. I thought I was right, and everything was right, then the wife decided, nope, see you later, so, that sort of took all your planning completely out the window..... I was a bit lost there for a while. I thought I was going to be travelling around the countryside, sharing my life, but that didn’t happen. I sort of changed, found other ways to entertain myself. I got in with a golfing group and found that was good. It got me out of town, which was good. I made that out like it was an appointment. I didn’t miss it.”

(Male Aged 66)

Feelings of anxiety and paranoia and thoughts of suicide arose for one participant, six months after he had ‘a well-planned retirement’. This had a severe impact on his ability to enjoy his newly found retirement lifestyle. Another participant commented on feelings of anxiety and depression arising within 6 months of a planned retirement. The participant had not had any prior history of psychological distress and discussed his lack of socialisation, lack of routine and having moved to a new area, were all contributing to this increase in paranoia.

“Once the initial euphoria of retirement had finished, I could recognise various changes (anxiety, depression, agoraphobia, fear of leaving my house). Paranoia was beginning to set in.... I was beginning to worry about things I wouldn’t normally worry about”

(Male Aged 65)

6.4.3.2 Planning finances

Ensuring finances were in order before retirement was frequently mentioned. Participants commented on the need to plan for retirement early, and to continue planning to give continuity and structure to life. Many participants agreed that organisational support and guidance, prior to retirement, would be advantageous in providing a successful retirement.

“Yeah, one thing that I do think is that their employees should have an obligation to refer them to a retirement consultant, not a financial planner or anything like that, just somebody who can run through – who’s like a contact”
(Female Aged 65)

Those recently made redundant discussed financial distress, social isolation and being unsure of their purpose in society.

“Not to the same extent because I don’t have the finance that I used to have. I don’t have – so that’s sort of a bit of an issue, but – no, because I used to sort of get – involve myself with my work and that was sort of my life and so I’ve had to find something to substitute for work. That’s been a bit difficult, finding enough areas to feel you’ve got a purpose – yeah, and keep going. Yeah.”
(Female Aged 65)

Although, others who had planned for many years, even some working for the same employer all their working life, found themselves worrying about their finances, not knowing if they were going to be heavily taxed, even after consulting a financial advisor:

“I still didn’t really understand how it all works. It’s too confusing. Like, I mean, I had retired, and here I am worrying ... I have got all this lump sum. Are they going to tax me? Things like that. It should have been a simple question. But, when I retired, I was thinking, ‘Well I had better not do too much because there could be a bit tax bill coming out of all of this. I never heard, but, to me, it was a worry.”
(Male Aged 66)

6.4.3.3 Planning for transition to retirement

Many of the participants in this study felt that it was important for employers to support workers in a stepped transition to retirement, working less days or hours per week to ‘ease’ the retirement transition. Participants also felt that employers needed to display a higher level of tolerance and acceptance of employees who need or want to continue working and/or volunteering.

“They (the employer) start talking about “what are you going to do when you retire, do you have a hobby? “How do you think you will get around with the money you receive, do you have a pension?” (Male Aged 66)

6.4.3.4 Planning a new identity

Although women also discussed the need to have a plan for the day, it was triggered by feelings of ‘guilt, time wasting and laziness’. Reflecting on her behaviour as a working woman, one participant shared that it had taken her over 12 months to get to the point where she could start to relax and indulge occasionally;

“But now, I go to the hairdressers 10 minutes before ... that’s a big achievement for me. But I used to feel sort of a bit guilty that I was spending this much time just doing my things, but now, they’re just second nature. That’s it.” (Female Aged 65)

Many participants reported difficulty starting the day due to demotivation. Some participants commented they had found a ‘purposeful existence’, with one male participant discussing a desire to share his knowledge of mental health awareness and another stating that he had bought a smaller, more economically viable farm, to reconnect to the land that he had known for over 50 years, to help him establish his new identity.

6.4.3.5 Expectations of retirement vs reality

Peavey's Art of Strategic questioning (Peavey, 2000, Peavey 2008) was used to design the questions in this study and to analyse the experiences of retirement in rural New South Wales, focusing on mental wellbeing. With many of the participants commenting on their retirement experience as being very different to their expectations and understanding.

"People go into their retirement phase with a positive outlook and all the optimism like maybe they're going to do this, they're going to do that and then reality sets in you get a bit tired than you anticipated and wonder "How did I do all those things every day?" and then doing it in the night as well, but it's not a positive experience for everyone and I reckon the depression sets in when they realise, "This is not what I thought it was going to be." It's a bit different for me."

(Female Aged 65)

6.4.4 Key theme 4: Resilience

One of the key themes that arose in this study was the concept of resilience. Participants linked this back to childhood values, connectedness to the land and having a rural identity. Many expressed a level of surprise at their strength and resilience that they strongly believed was closely tied to values that their parents had taught them and that this was in fact helping them to understand their current environment (when relating this back to their own lack of employment, deteriorating physical and psychological health and financial situation). One participant shared her own mother's story from the Second World War as a way of showing where she had learnt what resilience was, and to demonstrate how she herself had learnt how to be resilient.

"Let me very quickly tell you the significance of what my mother taught me about resilience. She was six months pregnant in London and they'd asked her to evacuate during the 2nd World War in 1940. When they found her, the first thing they did was shout out, "We found someone. She's really pregnant," and then someone called back over the shoulder. "Bring a cup of tea!" My mum always taught me 'Get the kettle on. Let's sit down. Let's try and talk it out"

(Female Aged 60)

Some participants commented on the additional level of resilience acquired from living in a rural area and noted the strength and courage other local community women provided to them. One female participant reflected on women coming into the local community service from remote townships, for social activities and support to help them with the emotional stress that the drought was causing them (type of service has been omitted for privacy reasons)

“And I think that’s one thing the ... has shown me is these women come in and how some of them get the courage to come in and say what they say is beyond me...and once they sort of – I don’t know whether you give them an opening or what, but they seem to open up

(Female Aged 65)

6.4.4.1 The Importance of Friends

Others discussed their thoughts on suicide, post retirement, and their resilience against it particularly the importance of friends. Participants commented on the values they were taught in childhood such as the importance of friends and family, with one participant commenting on the importance of community in assisting him with support in retirement.

“I joined the men’s shed because I thought I would be of some use, but it turns out that they were more use to me than I was to them...” (Male Aged 82)

All the men in the study noted the importance of friendship and companionship as an important factor in reducing depression and retiring ‘well’. Most participants actively sought to join activities they thought they would enjoy such as further education and community based activities (Sporting Clubs, Art Workshops, attending cattle auctions, Men’s Shed’s. Others did not want to fully retire, commenting that it would make them ‘grow old faster’. Most participants in this study were actively involved in recreational or related activities.

6.4.4.2 Resilience to drought

The importance of the drought on mental and physical health in rural Australians cannot be underestimated. Almost all participants mentioned the effects

of the drought and how it impacted on mental health, physical labour, lifestyle and family. Many participants mentioned that it made retiring from the land difficult as it was impossible to sell a farm or maintain a productive agricultural industry. However, for this cohort of rural Australians the drought was a real concern and participants displayed the resilience and heightened level of determination to stay living in a rural community post retirement. Further into this study, the Stakeholder's interviewed discussed serious concerns over the level of confidence in the rural residents perceived levels of resilience. This became a very important finding in this study. See Chapter 7).

6.5 Discussion

This study investigated the impact retirement has on physical and mental wellbeing including the expectations and adjustments to retirement, and whether there is the potential for increased rates of suicidal behaviour in this group of rural dwelling individuals. The study focused on the difference between the participants' reality of retirement and how they envisaged their retirement in rural Australia (i.e. the reality vs the expectations).

Suicides in Australians over 65 years of age rank in the highest category of death, and, people in this age group are more likely to have a chronic health conditions, with cancer present in 25% of males over the age of 85, who died by suicide (ABS, 2017). Mortality rates of rural and remote Australians increase with distance compared to those living in urban areas (655 per 100,000: 522 per 100,000) (AIHW, 2017). Statistics from the Centre for Rural and Remote Mental Health (CRRMH, 2017), suggest that rural rates of suicide may be as high as 50 per 100,000. With this rural population already having trouble and repeated periods of adversity, such as prolonged drought, fires and floods, these phenomena may increase the impact a death by suicide has on many of these communities (CRRMH, 2017).

The four key themes identified in this study highlight the loss of identity, social isolation and changes in physical and/or psychological health post-working life of participants. Although, retirement can have many positive effects on individuals, it may also create feelings of social isolation and a deterioration in self-worth and

motivation, along with varying levels of disconnectedness from others (Zhu, 2016). Heightened levels of perceived burdensomeness and alienation could place one at higher risk of dying by suicide (Silva, Ribeiro & Joiner, 2015). Research suggests that as some individual age, fear of dying decreases, (Cicirelli, 2001) as cited in (Stanley et al., 2016) and the likelihood that suicide attempts will succeed increases (Conwell, 2017).

One of the key outcomes of this study was the difference in the expectations of retirement and the reality of the retirement and ageing process in general. Participants had not considered the loss of friendships, significant change in lifestyle (because of lower financial status) and changing identity, as part of their individual retirement reality. Similarly, participants had not realised how rapidly their health could deteriorate, and how depression and anxiety could occur in a relatively small amount of time, without having any previous history of psychological illness.

The difference between the expectations of retirement versus the reality of retirement has been previously explored (Fairley, 2013; Goodwin & O'Connor, 2014) along with the ideology of planning for retirement. As Moffatt and Heaven (2017) discuss, there seems to be a gap in some retirees when it comes to practicing this strategy, due to limited finances, declining health and loss of relationships. A recent Australian study by Longhurst (2018) titled the "Retire 200 Project", support the findings of this research, with a particular emphasis on the difference between "jumping versus being pushed" (Longhurst, 2018, p.xix); planning for your retirement with regards to stability in finances and improving and maintaining health; and an ability to access a retirement planner prior to retiring permanently (Longhurst, 2018).

For those retiring in the future, participants suggested that it would be beneficial to have a planned approach to retirement, coupled with a supported focussed transition process through the employer. Options such as stepped retirement, or reduced hours may enable potential retirees to gently leave the workforce, while still maintaining a sense of purpose and identity. While planning for retirement was a strong theme in the research findings, it was also evident that even with a well-planned retirement a person can experience similar issues to one who was unable to plan for retirement, due to stress or worrying over taxation laws. Research conducted

by Wiseman and Whiteford (2009) suggest gradual transition into retirement with continued connections to a rural occupation are of importance to increase feelings of connectedness and reduce a sense of lost connection.

The theme of resilience in rural communities is reflective of previous studies in this area (Judd et al., 2006c; Ng, Wilson & Veitch, 2015; Winterton & Warburton, 2012). Although, many of the participants discussed resilience and strength, a lack of health literacy may be present when psychological or physical intervention is needed by an individual (Sorensen, Van den Broucke, Fullam, Doyle, Pelikan, Slonska & Brand, 2012). This may contribute to less favourable health outcomes for those living in rural Australia (Radermacher & Feldman, 2015).

Whilst the Australian Commonwealth government has provided more funding to mainstream mental health services, state governments have reduced their community and individualised support services, causing a further gap in service provision (Australian Government NMHC, 2016). This reduction in services may explain the phenomenon of the “Missing Middle” a term referring to the gap in services between planning and actual implementation of care in the primary health sector (Gorry & Hamilton, 2017). This lack (or perceived lack) of community-based services is likely to be more evident in rural areas, where acute and primary care services are often less accessible. Coupled with a lack of trust in people who are not from the local area, or who are acquaintances (Robinson, Burley, Mc Grail, Drysdale, Jones & Rickard, 2005) as well as unhealthy recreational activities, (excessive alcohol consumption and smoking), places rural residents at risk of overall poorer health outcomes (AIHW, 2018a).

Awareness of programs such as Australian Men’s Sheds, which aim to decrease social isolation and assist men to give back to their communities (Australian Men’s Shed, 2016), may have a positive effect. Continued health promotion programs could benefit rural residents, to raise a greater level of awareness of the deterioration of physical health, prior to entering the retirement phase. It is possible that the resilience displayed by the rural participants of this study are indicative of the broader rural population, and may be protective factors against suicidal behaviours, however it is important to note that underlying the strength and resilience are factors of social

isolation and loss that may equally contribute to suicidal behaviour in those most vulnerable.

Although the concept of ‘retiring well’ or successful ageing needs to be further explored in greater detail, research suggests that those with a positive attitude towards life, older people can achieve a fulfilling retirement (Longhurst, 2018). It is important to note that for many older people working industries, such as agriculture, their place of work is also their family home, and this intersection of work and home life may contribute towards a deterioration in overall health and wellbeing (Wythes & Lyons, 2006).

Limitations in this study included difficulties with recruitment due to the research being conducted during an extensive drought in the state of New South Wales (See Chapter 1). Recruitment became problematic to the point where there were only four males and three females recruited. One can propose that the difficulty with initial recruitment could have been due to the males needing to continue working on their rural properties, whilst the 3 females who were interviewed were not involved in the agricultural industry and therefore were not expected to remain working on their farms. To recruit people into the study, the researcher’s decided to advertise across the state of New South Wales. It can be noted the night number of males to females in the study – this is due to the remaining participants being recruited from a rural Men’s Shed in New South Wales.

Another limitation to this study was the gender bias present because of the difficulties that the researchers experienced when attempting to recruit females into the study. Females who opted into this study had all been made redundant and the researchers. This was deemed to have a confounding effect on the results of this study.

6.6 Conclusion

The findings of this study suggest that the transition from paid work into retirement leads to expectations and feelings that are difficult to predict or comprehend. It is important to acknowledge the effect that either planned or forced

retirement has on men and women and their respective levels of vulnerability. The participants' in this study experienced social isolation, decreasing physical and psychological health, loss of identity, loss of a 'place' in society and feelings of disconnectedness. With these traits commonly linked to suicidal behaviour, it is important to highlight the impact that retirement has on individuals. This study provides evidence underscoring the importance of an awareness of the changes to mental and physical wellbeing prior to, during, and after retirement or retrenchment, possibly leading to suicidal behaviours in older rural Australians.

It is important to note the contextual factors rural older Australians encounter, such as rural identity, changing climate, financial constraints, changing economy and transgenerational ownership issues. Factors that are potentially protective against suicidal behaviours are; resilience and understanding when there is a lack of resilience, long term planning for retirement coupled with an understanding of the financial implications of receiving a large sum of money at the end of the working life, strong links to community services and connecting with family and friends. In addition, continuing to live in a rural area may contribute to overall life satisfaction (AIHW, 2019), increasing physical and intellectual activity in combination with stepped retirement and awareness of possible deterioration in physical and/or psychological health were found to be possible protective factors against suicidal behaviours in older rural communities.

Chapter 7: Ageing and Retiring in Rural Australia: Perspectives of key stakeholders

7.1 About this paper

This chapter presents the results of the second phase of the study, investigating key issues of retirement and ageing in rural Australia, from a stakeholder perspective. The original aim of this research was to investigate retirement and suicidal behaviours. Due to the issues of recruiting older rural residents because of drought/ inhibitions/ lack of trust of the unknown researchers, the researchers decided to interview key rural stakeholders, involved in working with rural residents who had been exposed to suicidal behaviours to ascertain an understanding of the issues with recruitment in this cohort. This paper was submitted to the Journal of Rural and Remote Health as '*Retiring in Rural Australia: Perspectives of key stakeholders*'. (Under Review).

Authorship

We agree that this is a true and accurate record of our contribution to this paper.

Concept

Crnek-Georgeson, K. T Date.....

Wilson, L. A..... Date.....

Data Analysis

Crnek-Georgeson, K.T.....Date.....

Paper development and Preparation

Crnek-Georgeson, K.T.....Date.....

Wilson, L. A..... Date.....

7.2 Introduction

As Australia's population ages, so too does the percentage of older rural residents live with physical and psychological illness (AIHW, 2018a). This group has poorer access to health services, lower educational levels, higher rates of alcohol and tobacco consumption, and increased rates of injury and lower levels of income (AIHW, 2018a). Despite this, most rural residents experience a higher level of life satisfaction and enjoy living and working in rural Australia (AIHW, 2018a). Half of Australia's land is used for agriculture (ABS, 2017), and 67% of Australia's export value is produced in rural and remote areas (CRRMH, 2017). With changes to agricultural practices and an increasingly unpredictable climate the ageing population in rural areas experience challenges when it comes to reducing their workload or contemplating retirement.

As global temperatures increase (WHO, 2014b), and the population aged 85years and older expected to double by 2066 (ABS, 2017), there is a need to understand the impact that rural living has on health (Horton, Hanna & Kelly, 2010). Three in ten Australians reside in rural and remote parts of the country (AIHW, 2017). In 2016, the number of suicides in rural Australia was twice that of urban areas (ABS, 2017). Older males living in rural areas have the highest suicide rate in Australia (32.8 per 100,000) (ABS, 2017) while older females do not reflect this suicide rate suggesting that rural females display higher levels of resilience than rural men (Hanigan, Butler, Kokic, Hutchinson & Hanigan, 2012, Nicholls, Butler & Hanigan, 2006).)” It is also possible that rural women are not exposed to the same risk factors as men, or purely that they use less lethal means (Page & Fragar, 2002), not necessarily that they are more resilient. Female rates of suicide are approximately one quarter that of males (25:75) (Black Dog Institute, 2020), although female rates of suicide attempt are in fact higher than males, with females more likely to attempt to die by suicide than males (57.5% compared with 44.2%), reporting higher levels of suicidal ideation (Department of Health (DOH), 2011).

Research suggests that rural residents believe they are resilient to the effects of living in a rural area and possess an ability to “bounce back as a way to describe resilience” (Hegney et al., 2007). Australian researchers suggest many rural dwelling

adults, particularly farmers, use coping techniques such as denial, suppression, minimisation and emotional control (Hull, Fennell, Vallury, Jones & Dollman, 2017), manifesting in stoicism and a reduced likelihood to seek help.

Throughout the course of this research project, the state of New South Wales, Australia, experienced one of the worst droughts ever recorded (DPI, 2019) and this influenced the ability of the researchers to recruit participants for this study. Therefore, the original research focus changed slightly to include the voices of rural stakeholders to understand the phenomenon of retiring in rural Australia. Research suggests that engaging stakeholders in community and/or research projects provides an increased understanding of the local community as they are often gate keepers and community champions who have a high level of understanding of the needs and issues within their own communities (Powell, Dalton & Perkins, 2018) and to create a more person centred agenda that could influence future policy (Guise, O' Haire, Mc Pheeters et al., 2013), and to enable a greater level of sustainability for change in the future (Powell, Dalton & Perkins, 2018). As a result, the researchers made a conscious decision to change the focus of the questions when it became clear to them that retirement was not in the forefront of the resident's minds. The researchers decided to use two very broad questions so as not to influence the responses of the stakeholders, and to gain a deeper understanding of the issues effecting older rural dwelling adults.

7.3 Methods

This phenomenological study (Van Manen, 2016) used face to face interviews to investigate the lived experiences of rural stakeholders working with older rural residents in New South Wales, Australia. This study builds on previous research investigating the perceptions of retirement in older rural residents living in this area. This study was approved by the local Human Research Ethics Committee of Western Sydney University (Protocol Number: H12022).

7.3.1 Recruitment

Participants (Rural Stakeholders) were recruited from local health and service networks, as well as suicide prevention services. All rural stakeholders were provided

with study information and asked to provide informed consent to a one hour interview and audio-recording. Recruitment continued until data saturation was reached. The researchers attempted to answer the following questions;

1. What the biggest issues are for older rural residents living in rural Australia?
2. What things do older rural residents talk about with regards to accessing services?

7.3.2 Data Analysis

Data recordings were transcribed verbatim by the principal researcher. The data was de-identified entered into an Excel (Microsoft, 2017) database. The researchers coded the data into key themes and sub-themes using an iterative process of review and discussion.

7.4 Results

Seven rural stakeholders were included in this study. Four key themes were identified from the data (Drought, Technological Literacy, Rural Culture and Access and Services) (Figure 8). Sub-themes emerged out of each key theme



Figure 8 Relationship between themes identified by the rural stakeholders

7.4.1 Theme 1 - Drought

Stakeholders reported drought as the biggest issue for people living in rural New South Wales in the years of this study (2017-2018). During this time, New South Wales was classified as 100% drought affected (DPI, 2019). Whilst adding to the stress of living in a rural area, the quote below highlights the level of complexity of decision making, that living with drought had created;

“right at the moment, the drought is front of mind for everybody because it impacts on longer term decisions as well.....as well as other issues that people are always dealing with, but, at the moment, the drought is just all consuming and it affects all the decisions around people, when they might retire, sell, whether their children are interested in coming home, or, whether they are just going to make some other arrangement, the drought it sort of clouds every other decision they are going to make”. (Interviewee 4)

With the high level of concern over drought, and water licences being used as added security for farming bank loans across Australia (Dingle, 2018), one stakeholder reported this additional stress also needed to be taken into account, as farmers are being charged the same annual fees for water, regardless of the amount of water they use, and some farmers do not have access to any water at all;

“Farmers have been on restrictions for a while, but this is pretty severe at 8%. I remember one farmer up near [town] on the river, they were told they had no (water) allocation and the grower said that’s fine we understand that, but we don’t want to pay our holding charges. Because there are still standard holding fees you have to pay to keep your water license, which the government takes every year, whether you are using water or not. They said ‘if that’s the case we do not want to pay these fees’ so the government gave them 1%”. (Interviewee 6)

7.4.1.1 Role of Media

An additional stressor was the role that mainstream media had in publicising the drought. Reports were heavily focused on the desperation of farmers to attract viewer’s attention;

“the identity that farmers are being portrayed as ... just because they have hand selected a few farmers that they think will sell well on media ratings when in fact that is not really an accurate reflection of what is going on...you know, an example of that is that gentleman who got on (television) and said that if he doesn’t get rain by next week, he is going to have to shoot all of his stock, um....that is very dramatic, and that never should happen, no matter what situation you are in, so, there are a lot of farmers who are saying, “Well, he is an idiot” That’s not the right thing to do” (Interviewee 2)

Whilst this highlights the impact of drought on rural residents, one stakeholder commented on how constant exposure of media reports of drought, had begun to affect farmers returning home at the end of the day.

“Once upon a time and they could at least come into their homes, turn off the television, and that would be it for the day.... They constantly see (drought) on their phones, on radio, on television and people really need to think about how they use social media”. (Interviewee 2).

7.4.1.2 Lack of Resilience and Strength

Stakeholders reported observing declining levels of resilience in local resident’s due to long term distrust and disbelief in the service system;

“The problem we have is the lack of resilience and strength in our communities, in our small towns and everything. That’s come from long term not listening by governments and service providers and you know, people like that, is that they just don’t understand it” (Interviewee 5)

Stakeholders observed increased psychological distress in some rural residents, suggesting levels of resilience are deteriorating;

“I mean some of them have benefited from that, psychologically, but, there are very mixed feelings, living amongst farmers, because the media story, in a general sense, has portrayed farmers as pathetic, helpless, unable to manage their land, which in some ways, beyond the attitude of your everyday Australian...which is pretty psychologically damaging to someone who is psychologically distressed”.

(Interviewee 4)

7.4.1.3 Lack of capacity to assess own needs

Of note were deteriorating levels of capacity for some residents to assess their own needs, coupled with an unwillingness to accept support;

“They are becoming isolated, and even if they have a younger family member, who is active in the farm, and might have a lot better knowledge, and might be able to help them through some of these technical challenges, they are often reluctant to take their advice anyway.....They don’t have a son or a daughter, they don’t particularly take notice of neighbours, um, they go into this bunker mentality, and I will manage on my own. In essence, they don’t manage.”

(Interviewee 4)

7.4.1.4 Lack of control

With prolonged drought comes increased financial distress due to buying water, hand feeding animals, increased feelings of lack of control over circumstances, and often depression. This lack of control affects quality of life. Several Stakeholders discussed the impact that long term drought has on the residents’ ability to manage their land and commented on a decreased ability to enact previously developed plans for survival of the farm;

“We are seeing quite distressed people.100% of the state is drought affected, that is giving farmers very little options in terms of how they respond... that lack of control... usually they would have a plan in place where they would do xyz, in this particular case, those options haven’t been available. This is the first time they are dealing with this type of situation. That feeling of uncertainty and feeling like you don’t have control and feeling like you can’t act in the way you normally do has obvious impacts for your mental health”

(Interviewee 2)

7.4.2 Theme 2 Technological Literacy

7.4.2.1 Technology

Technology is currently being used to improve the general health and wellbeing of people living in rural areas, with programs such as the Agency for Clinical Innovation (ACI, 2019) and Rural Aid Australia (Rural Aid, 2019) supporting physical and psychological health. Although technology may be working well in the health space, this may be causing inter-generational friction when traditional farming methods are challenged, creating a reported ‘bunker mentality’;

*“I have done it for 40 years and it worked the last time (Rural Resident)
They continue to do what they have always done that works less and less effectively”.* (Interviewee 4)

This may increase isolation for some farmers who are not as technologically adept, and who rely on print media and local television for information.

7.4.2.2 Positives and negatives of technology

Stakeholders commented that social media has largely had a positive effect in the community as it can increase communication and decrease isolation, showing farmers that people still care and think about them;

“So, I think while they are so desperate in that sense they are stock poor and struggling to feed and water, they would have to in that sense that they feel supported. I was talking to someone else early this morning who was doing hay runs, and there might be some farms that there might only have been enough hay for a week or two to feed their stock, I do not even think it to be that...though I think it is about boosting morale and support. Practically it is not a lot, but, maybe it is also that thing of maybe a little rain between now and then, it will at least keep us going to a little bit longer, but more than anything to know that people really do care” (Interviewee 1)

In addition, it was commented that social media could also be a constant reminder of drought that could be increasing stress and contributing to a deterioration in psychological wellbeing;

“Whilst we have obviously had droughts before, this is the first one that people are obviously a lot more engaged with social media and using that as a platform to get their information, which has positives and negatives do bring people closer together, but, they also can be quite detrimental to your mental health, depending on what content you share in that group, um, and farmers feel completely surrounded by it”. (Interviewee 2)

7.4.3 Theme 3 – Rural Culture

7.4.3.1 Resistance to Change

The data reflected the increased stress on older farmers caused by new ways of farming. One stakeholder noted this was creating barriers to help seeking and closure of thought process.

“One theme that comes up often is dealing with the changes in technology, both communication and digital, but general farming technology practices, it is an incredible challenge for anyone, if you are 70, the stress that those changes put upon people, effectively make them go into some sort of a stress related closing down of thought”. (Interviewee 4)

7.4.3.2 Trust and Stoicism

A key message from stakeholders was reaffirming positive elements of rural culture, one farmer reportedly used the culture of trust to mask his own inability to manage the farm;

“...he only dealt with one agent who he felt he could trust, and he was very suspicious of whether the place was as good as what they said it was, you know, partly, that is to justify his own failing on the place that he is currently on, but, what was clear, for him to make a move, he had to trust the person he was dealing with (Interviewee 4)

Reinforcing this, another stakeholder commented on the willingness of residents to talk to others about physical injuries and scars, but resisting the need to discuss anything on an emotional level;

“I think most farmers are quite happy to talk if they have lost a finger here or they have cut an arm open there, because they can show everyone, but they are not going to tell them about the emotional scars” (Interviewee 6).

7.4.4 Theme 4: Access and Services

7.4.4.1 GP’s and Psychological Support

Rapid access to secondary services, such as General Practitioners (GPs) and Allied Health services was identified in the data, with emphasis for people with suicidal ideation. Those who make the decision to get help, need it on the day, otherwise further help seeking efforts were minimised. Lack of GPs experience and concerns over the first point of contact was identified many times in the data;

“They have to get through the receptionist before they can go to the GP. If someone was to rock up to the surgery and is making statements that are pretty clear that they are suicidal, but that receptionist has no idea and they turn them away... It is all those little things, which is why, you know, it is so important that just about every person receives some sort of training on some level because at the end of the day every one of us is working together to help someone... friends, family, doctor, the guy at the fuel station, like the bartender...everyone needs to be involved”. (Interviewee 1)

“Or what if you get a GP who has not had any positive (mental health) training, which is still the case for a great majority” (Interviewee 3)

Stakeholders mentioned that the language used (mental health) may not resonate with rural residents who are experiencing suicidal thoughts;

“It is also this concept word of mental health. It is misnomer for a lot of people. It still has the word mental in it, which has its own burden of how that feels versus health and nobody is, well, rarely are they actually using the word suicide, so a person can hear you talk about mental health and mental wellbeing all day long and you are suicidal and they are not talking about suicide, so, I can’t tell you that I am suicidal”. (Interviewee 3)

Another stakeholder referred to rural residents as feeling more confident to discuss their issues with less clinical members of their community;

“So, there is that stigma about speaking to clinicians and I think people really like having that non-clinical person that they can speak to and that is absolutely what rural financial counsellors are doing” (Interviewee 1)

One stakeholder mentioned an increase in psychological distress in ex-servicemen living in rural communities, and suggested further training of local health professionals and enforcement agencies is needed to assist returned service men and women;

“That’s one thing that the medical profession has really let us down. You would think that after the Second World War, where we had people coming back the same... they are feeling not wanted, and that is why the depression started”. (Interviewee 7)

This stakeholder believed returned soldiers should be able to access a mentoring program, like Alcoholics Anonymous (2019) as a way of support;

“I think people with PTSD, look for role models. People who they have known, officers that type of thing.. They have to be able to listen and understand what the person who is suffering and try to help them, not just immediately put them into the medical situation, or see a psychiatrist Now one of the greatest things way back in history, has been with the alcoholics, where they had their meetings” (Interviewee 7).

Other Stakeholders also mentioned the use of mentoring programs for suicide prevention at the community level;

“100% volunteers, 100% peers and that is what ‘Alternatives to Suicide’ is. It is people who are actively living with suicidal thoughts, or who have had an attempt, to come together and support each other to stay alive. There is an enormous amount of fear from the bio-medical perspective, but, evidence of peer support goes right across just about everything else, whether its people

hearing voices, people with cancer, people with alcohol and other drug challenges” (Interviewee 3).

One way to encourage rural residents to talk was highlighted by an observation from another stakeholder;

“Farmers in particular, listen to other farmers, and other farmers who have some sort of credibility” (Interviewee 2).

Suggestions for reducing the suicide rate in rural areas came from the rural stakeholders, stating that people living in rural areas prefer to talk face to face with other ‘townsfolk’, creating a human connection and making them feel as though they can make a change;

“Yes, we call it a Mate Keeper. It is a Gatekeeper program. Where you upskill ordinary members, people who are respected or listened to, they could be football coaches, hairdressers, or whatever”. (Interviewee 5).

“How come we don’t have the capacity to essentially train people, who are in a small rural or remote community, who are essentially trained like Lifeline but for locals? It stays locals, is local, they can support those people and be a face to face support. A family had an individual who was in suicidal crisis, she had horrific experiences from being taken to the hospital, so they created a roster of about 10 people, who stayed with her essentially for 24 weeks...she is fine. If somebody can help her do that. Some of the research shows us that for some...who are identifying in themselves that they are suicidal and they have gone through the extra steps of the technicality of researching, gathering whatever they might want to do as their method, there is a window, often two to three days, 24-48 hours, that they are their most vulnerable risk and hospital may not be their best option” (Interviewee 3).

“The fact of sharing people’s real stories actually helps people to identify when they are going through a similar thing, they go, ‘Well, if they did it, I can do it’.” (Interviewee 2).

Stakeholders also discussed towns having the support of a social worker rather than a psychologist or psychiatrist, and that there are few trained psychologists in rural areas;

“We have probably got a good 5 or 6 psychologists, which for a town this size is really unheard of, so people in this particular area are pretty lucky, but then you go to(town) and they do not have a single permanent psychologist there and I think their population is maybe 8,000” (Interviewee 1).

In addition to a lack of service availability, when ready, people may still have to wait up to 6 weeks before being seen by a local GP or mental health professional;

“I mean we know people in rural areas are less likely to take help, but then on the other hand when they do go to seek help, there is often long waiting periods and that varies massively between each town “ (Interviewee 1).

Recommendations to increase the visibility of services was also discussed by rural stakeholders;

“We still have a way to go to upskill people to identify when they actually need professional help. The second is we often get told, ‘there are no services in my community’. I am not saying rural and remote access to services is perfect or without it’s issues, but, often community centres, because there is rarely a shop front, or don’t have dedicated signs that say, ‘There is a Headspace here’, they might be outreach team that comes every second Tuesday, so that awareness of services is really the issue”. (Interviewee 2)

7.4.4.2 General Ageing Issues

High levels of physical exertion such as farming work take a toll on the body demonstrated by an older male trying to maintain his farm and look after his wife who was recently diagnosed with dementia;

“It has been happening a lot around the countryside, and it is certainly related to the drought as the drought has impacted upon older farmers, and, not just older farmers, but, in this case, it is more accentuated with older couples or older individuals, who are losing their capacity to manage”

(Interviewee 4).

Stakeholders discussed several examples of older male farmers not wanting to stop farming or change the ways they have done things over the course of their working life, with fears of loss of independence, lack of confidence in doing anything other than farming, and loss of identity.

“and as people get a bit older, it hardens in them, and they don’t want to be told by anyone, and they don’t want to be told by their children, or their wives, mostly, often blokes, but, not always, and they just refuse to the bitter end, where they are literally taken by force or by Ambulance or an undertaker...because he doesn’t want to stop farming. Now this is against the wishes of his daughter, although she understands exactly why he needs to identify as a farmer, he told me that he doesn’t want to stop farming because he doesn’t see himself as doing anything else and he thinks that he would deteriorate terribly”.

(Interviewee 4).

7.6 Discussion

This research intended to investigate the phenomenon of retirement in rural Australia, however during data collection, it became evident that drought and the effects of living in drought, was a more important issue than retirement. This changed the dynamic of the research in terms of what was most important for older rural people, although it was clear that the implications of environmental circumstances have a huge impact on the ability to plan for retirement. What did become clear was the changing perceptions of rural residents around their ability to live in rural Australia. Over recent years the perception of ‘rural liveability’ in people living in a rural or remote location has been a topic of much research (Allan, Ball & Alston, 2010; Judd, Cooper, Fraser & Davis, 2006a; Ng, Wilson & Veitch, 2015; Winterton & Warburton, 2012) highlighting a deterioration in health status due to environmental

change (drought, flood, increased temperature) and globalisation (ABS, 2017; Dingle, 2018). Research undertaken following the Queensland floods (Keogh, Apan, Mushtaq, King & Thomas, 2011) reported the need for residents to be resilient and maintain strong social connections with the local community, to reduce physical and/or psychological illness.

Unpublished data (this author) suggests that rural residents believe they have a high level of resilience that enables them to remain living in a rural area, however this was not reflected in the stakeholder interviews. Stakeholders suggested that many older residents experience a ‘closing down’ of thought or denial as a way of protecting themselves against the effects of long term drought. It is possible that this is because of a low level of health literacy (Garnaut, 2011, Joiner, 2005; Raphael, Taylor, Stevens, Barr, Gorringer & Agho, 2009) with residents unable to recognise they need intervention coupled with an inability to understand medical terminology. This is reflected in the ‘disconnect’ between the perception of rural residents and those of rural stakeholders.

Previous research suggests rural residents choose to access a local GP only when symptoms arise, or they become unwell in a short space of time (AIHW, 2018a). This results in symptomatic treatment rather than prevention or engagement in health prevention activities (AIHW, 2018a) and this was reflected by stakeholder views in this study. Similarly, in this study rural stakeholders confirmed previous research (Raphael et al., 2009) which suggests females are more likely to affirm drought will continue, express concern for their welfare and that of their family, as well as identify the need to change current behaviours to prepare for further natural disasters. In line with research by Judd and colleagues (2006b) in this study it was highlighted that older rural males ignore health issues and stoicism as a way of masking psychological and or physical illness.

Many rural residents experience poor health outcomes, due to limited access to health services, lack of control of provision of services (AIHW, 2018a), and reduced access to new treatments for chronic or complex health issues in older people (Beckmann, Bennett, Young & Roder, 2014). Research on access to Information and Communications Technology (ICT) demonstrated the capacity to improve health

outcomes through improved social capital and decreased isolation but reported the poor access to these services in rural areas may contribute to lower quality of life (Warburton, Cowan & Bathgate, 2013).

Of note, in the findings of this study, was that all eight of the participants identified themselves in the 'lived experience of suicide' group, and ten in the 'non-lived experience of suicide' group. All the participants commented that they had been exposed to suicide through family or friends and all reported an awareness of the importance of monitoring their mental health. This was evident in the four key themes that arose in the results of this chapter (Identity, Loss, Planning and Resilience) (See Chapter 6).

Garnaut (2011) suggests that farmers will pay more for transport, fuel and farming products, with an ability to expand into the future, if farming practises embrace current technology. This study demonstrated that many older farmers are unwilling to change farming practices and cannot accept the value of technology in farming. Stakeholders see this unwillingness to change as a 'bunker style mentality' and suggest it may lead to an increase in poor physical and mental wellbeing. Ng and colleagues (2015) highlight costs associated with acquiring new farming technologies introducing financial factors that may limit uptake of new technology.

The results of this study reflect other research (Dingle, 2018; Crnek-Georgeson, Wilson & Page, 2017; Kunde, Kolves, Kelly, Reddy & De Leo, 2018; Kunde, Kolves, Kelly, Reddy & De Leo, 2018; Stice & Sara-Canetto, 2008; Alston, 2012; Kolves, Milner, Mc Kay & De Leo, 2012), highlighting factors which have the potential to lead to increased risk of suicide in older rural residents. Factors such as isolation from community, barriers to health services, stoicism and self-reliance were identified as barriers to psychological wellness, as was denial of the implications of long-term drought. All known factors to be associated with suicidal behaviours (Dingle, 2018) Additionally, feelings of hopelessness relating to retirement plans, concerns over the ability to continue farming, and an inability to retain farming contracts, contribute to an increased risk of suicidal behaviour (Alston, 2012).

The topic of suicide in ex-service personnel was raised in this study. With suicide rates between 25 and 33 deaths per 100,000 (AIHW, 2018b) in this group and ex-service men and women returning to rural areas upon completion of service, recent literature highlights the need for further research in this area (Department of Veteran's Affairs (DVA, 2016). Although there has been an increase in psychology services for soldiers through the Department of Defence (DOD, 2019; Soldier On 2019) they receive only one percent of funding from the Australian Government. This creates further challenges for local support services when attempting to service the needs of the community, already experiencing distress from ongoing drought.

Stakeholders commented on the importance of adequate and visible service provision, culturally trained professional staff and access to health services when they are in crisis. This suggests a need to; increase the profile and provision of health promotion programs, educate health professionals on issues facing older rural Australians, monitor levels of resilience in relation to physical and psychological deterioration (pre and post retirement) and continue health promotion programs that increase awareness of the effects of living in long term drought conditions and improve the level of health literacy in rural residents (Sorensen et al., 2012).

A limitation of this study is the small sample size, although the data collected were rich and informative. Additionally, throughout the course of this research, New South Wales was declared to be 100% drought affected (DPI, 2019), which impacted on the original research question of transition to retirement in rural Australia. Limitations to this study have been discussed further in Chapter 8.

7.7 Conclusion

This study highlights a 'disconnect' between the perception of resilience in rural residents and stakeholder observations of residents' resilience. The research also highlights the implications of drought and environmental factors on the health status of rural people and their ability to plan for retirement and future activities. This research highlights a deterioration of resilience in rural people, a lack of choice in health support services and a decreased level of ability to understand the importance

of maintaining overall health. This is of importance when considering the possibility of living to an advanced age in a rural area, with the possibility of further long-term drought and poor access to physical and mental health services. In addition, the rural culture of stoicism that masks help seeking behaviours should be identified early by health providers to minimise the risk of suicidal behaviours in this group. Future research should focus on the factors that increase resilience in rural communities during periods of drought, and those that reduce resilience

Chapter 8: Discussion and conclusions

8.1 Introduction

This research investigated the phenomenon of retirement in older Australians (45 years +), with an initial focus on mental wellbeing and suicidal behaviour in older rural Australians who had been forced to retire early through illness, injury or redundancy. This work attempted to provide responses to the following research questions;

1. Is there an association between retirement pathways and mental wellbeing and suicidal behaviour in older age rural Australians?
2. What are the risk factors and possible protective factors between retirement pathways, employment transitions, mental wellbeing and suicidal behaviour, factors between retirement pathways, employment transitions, mental wellbeing and suicidal behaviour?
3. Provide context specific recommendations to inform suicide prevention policies and programs in older Australians in a rural context

These questions have been addressed using reviews of the literature on factors influencing suicide in older rural males and the phenomenon of retiring in rural Australia; one study of rural residents, consisting of 18 residents, and one study of rural stakeholders, consisting of 7 rural stakeholders.

Each study group was discrete that is, the rural stakeholders had no relationship to the participants in the study.

8.2 Discussion

Research conducted on published literature from 1950 – 2014 suggests there *is an increased risk* of suicidal behaviour when people enter the transitional

retirement phases (Crnek-Georgeson, Wilson & Page, 2017). Using the current body of literature, evidence from both of the literature reviews conducted in this study and results of this research, it is evident that retirement practices across the world are changing, with people expected or mandated to continue working, in some cases, ten years longer than previous generations (Gratton & Scott, 2017). Although this may be beneficial to some, this research has shown that there will be many older people who will be placed at a disadvantage now and into the future, potentially increasing the risk of psychological and physical deterioration and leading to suicidal behaviours (Joiner, 2005).

It must be noted there is a distinct gender imbalance in the increased risk of suicide, with males known to experience a more marked deterioration in coping ability, more age-related diseases, greater difficulty with retirement transitions, and increased likelihood of generational infighting (Guiney, 2012). Although, this may be more reflective of the paucity of females who have been recruited into studies on retirement behaviour due to the ever increasing gender gap for older women unable to retire due to lack of retirement income (WHO, 2017; Coates, 2018). This will be discussed in the limitations section of this chapter.

It is evident most of the literature on suicide in the older rural population focuses on factors impacting upon male suicide. There is however a case to be made for including females in this body of research. This study of older rural residents who have retired either voluntarily or involuntarily, suggests that females are also at risk of suicidal behaviours because of increased financial distress, deterioration of physical and psychological wellbeing and the experience of redundancy in the workplace. Current literature on global retirement trends suggests that people who were involved in social activities prior to retirement and continue these activities into retirement are more socially engaged, have a higher sense of self efficacy and greater wellbeing (Liu, Fang, Chan & Lou, 2019; Chanda & Mishra, 2019; Steffens et al., 2016).

The results of the two research phases identified different issues for both rural residents and rural stakeholders. Rural residents identified Loss, Identity, Planning and Resilience as key themes, with a differing retirement experience by gender. Men

had more opportunity to save for their retirement, with women experiencing multiple career breaks, bouts of unemployment outside of the home and greater financial distress. All the women in this study had been made redundant and only one-third of the participants in this study (n=18) had retired voluntarily. Leaving two-thirds under prepared for leaving the workforce permanently (financially, physically and psychologically) with little or no access to Transition to Retirement (TTR) planning (Stancliffe et al., 2013). Rural participants reported feelings of anxiety, depression and fear once they had finished their paid working life, even if they had access to financial planners prior to retiring. This level of uncertainty was causing them considerable levels of psychological distress, along with the normal levels of biological ageing (WHO, 2015) that occurs in the human body after the initial honeymoon period of retirement (Longhurst, 2018).

The data gained from the rural stakeholders suggested that the biggest issues for older rural residents living in rural Australia were ‘Drought, Technological Literacy, Rural Culture and Access and Services’. In addition, rural residents in this study believed they were resilient to living in a rural area, although, rural stakeholders observed markedly decreased levels of resilience in rural dwelling adults, leading to increased psychological and physical illness, poor health literacy, with a level of ‘bunkering down’ mentality that was very concerning to rural stakeholders. Many of the rural stakeholders suggested that this was because of the ongoing drought and changing environment for rural Australia. The term “bunkering down effect” was of interest here as the rural stakeholders reported that many of the residents believed that if they continued to do things the same way they always had, then things would start to improve. One must wonder how this can be changed here.

Future researchers would be well placed to investigate this phenomenon in line with the issue of lethal access to means, with current research demonstrating that this is particularly true for people living in rural areas (Hazell, Dalton, Caton & Perkins, 2017; Bishop, Ransom, Lavery & Gale, 2017) It is important to note that varying methods of suicide are used in different countries and with different population groups such as in the United States of America, where death by firearm is the most popular method of suicide (Brent & Bridge, 2003) accounting for 50.57% of deaths in 2018 (AFSP, 2020). Suicide is still illegal in many countries across the

world therefore contributing to a higher level of difficulty in obtaining accurate statistics on the prevalence and impact of suicide across the globe (WHO, 2014a) as well as an increase in stigma and lack of accurate reporting of method of death (De Leo et al., 2010). Restriction of access to means of suicide is an important concept in prevention of future suicides, including pesticides, firearms and medications, particularly in rural areas, such as China and India, although legislation pertaining to gun ownership in Australia, Canada, Norway, New Zealand and the United Kingdom, has contributed to the decline in death by firearms in recent years. Intervention strategies for vulnerable groups such as culturally appropriate Gatekeeper training indicate success, particularly with indigenous populations in Australia, Canada, New Zealand and America (WHO, 2014a).

8.3 Strengths and limitations

8.3.1 Strengths

One of the major strengths of this thesis are the two literature reviews investigating the factors influencing suicidal behaviour in older rural Australians and the changing pathways to retirement across the world. The analysis and discussion of the current body of literature support the results of this in-depth narrative inquiry portraying the lived experience of people who had either retired or were considering retirement. This evidence can be used for promotion and publication to encourage a review of the existing retirement policy in Australia. This will also encourage employers, health and community services to support more people to cope with the transition into retirement; encourage employees to value older staff; support people to transition out of the workforce or adjust to a longer working life with higher levels of health literacy (Sorensen et al., 2012) and a longer healthier retirement.

Another key strength of this thesis is the identification of the difference between rural residents and rural stakeholders. The process of interviewing rural Stakeholders arose out of the need to find more participants for the study due to the inability to recruit appropriate numbers of rural participants due to the timing of the research project (as discussed in Chapter 1.2 Overview). This in fact became a central finding of this study with rural residents believing they were very resilient to living in a rural area, although, the rural stakeholders identified witnessing marked

psychological and physical deterioration because of the residents living with long term drought, poor technological literacy, limited access to services and lack of understanding of the rural culture. Stakeholders felt that rural residents need a much higher level of support, such as; individual counselling on site at their own properties, rural financial counselling, increased social support (National Farmer's Federation, 2018) and further mentoring for returned service personnel (DOD, 2019; Soldier On 2019). These supports could be complemented with rural cultural awareness training for newly recruited health professionals (Kunde, Kolves, Kelly, Reddy & De Leo, 2018).

A third strength of this thesis is the identification of the unexpected deterioration in both their psychological and physical health just prior to and post retirement, regardless of the level of planning and preparation that was completed prior to retiring by participants. Recommendations from these rural adults form the basis of improvements to the current retirement policies to benefit current and future retirees.

8.3.2 Limitations

New South Wales experienced one of the worst droughts in recorded history throughout the course of this research study and was declared 100% drought affected (DPI, 2018). This became a confounding factor to the research, where residents were unable to think or prepare for retirement due to the increased time taken caring for their drought affected farms (hand feeding, watering, veterinary care, carrying food, finances associated with paying for additional costs associated with the drought). This was also demonstrated in the gender imbalance that was present in this study. As there were only three females recruited into this study, all had just been made redundant, it could be reinforced here that the majority of females in the age group of 60 or older, are in fact, still working in order to increase their retirement savings, due to earning less money over the course of their working and unable to benefit from compulsory superannuation, therefore decreasing their overall chances of experiencing a comfortable retirement (Coates, 2018).

Retirement was not a consideration for many of the residents in this study, whether they were living on farm or in a township. Although there was a lot of rich

data collected in this study, only 15 males and three females (18 participants) volunteered to participate in this study. Of the 5 females, 2 of these were stakeholders and were still working. Interestingly, the remaining three female participants had been made redundant. It is important to note therefore, that this is not a representative sample of older rural females. Global research suggests that changes in retirement policies, historical underpayment of wages, and limited exposure to employment opportunities due to career breaks to care for children, many older women are involved with caring for others or engaged in paid work to improve their financial status (weekly earnings, savings and superannuation contributions) (Olsberg, 2015; NMHC, 2018; Coates, 2018). Australian research indicates older females were more likely to leave their job to care for an older spouse or family member with a disability, relying heavily on their partner's income for everyday living. Of considerable note were the statistics surrounding reasons to retire reporting 30% of females retired with no personal income in contrast to statistics on no retirement income for males being seven percent (ABS, 2018).

The researchers acknowledge that it would have been beneficial to recruit more female participants to investigate how these changes impact upon them with reference to the degree of physical and psychological deterioration, pre and post retirement (WHO, 2017). Perhaps this is an indication of the trend in older females needing to continue working longer to increase their retirement savings and be able to retire on a more suitable income (Olsberg, 2015; COTA, 2018; Coates, 2018) and something for future researchers to be aware of when attempting to recruit older females for research.

It also must be noted that there was a tendency for the researcher to focus on the responses of the female participants in greater detail when compared to the male participants. There could have been several explanations for this. The researcher wanted to expand the importance of the female participants to counter balance the larger response rate of the males and/or the researcher was experiencing a gender bias due to being female and therefore related more to the female participants. Although this was attempted to be counteracted using the researcher's own personal recorded reflections after each interview, perhaps this should have been considered as an

additional reflective exercise to create further in immersion into the data and to avoid the researcher's own personal bias.

Of considerable importance was the absence of additional demographic data from the participants in the study. Future researchers should attempt to gain more information from rural participants, such as the amount of time living in a rural area (this would contribute to an understanding of rural in/ out migration), as well as the number of years since retirement. Although the researchers had decided to include residents who had lived in the area for over 5 years, some rural participants disclosed afterwards that they had only just moved into the area.

Information from Stakeholders could also include, level of education, years since qualification, years in stakeholder position, and amount of time living in a rural area. This would also place further light on the challenging nature of health professionals working in rural areas. This could have been highlighted in greater detail during the process of synthesising results of the two literature reviews in this thesis, to more deeply analyse the overall picture of the research in this area.

8.4 Conclusions

Living in rural Australia can have many advantages, including the collective resource of social capital which can reduce loneliness and isolation, essentially encouraging residents to increase their levels of mental health and improve their overall health literacy, empowering them to take more autonomous control over their long-term health. The well-known camaraderie found in rural communities, and shared experiences of others, can help to improve the retired lives of people, although, this research demonstrates that levels of resilience to living in rural Australia have deteriorated because of living with long term drought, changing climates and globalisation. These are only adding to the usual stressors experienced by rural dwelling Australians.

Continuation of a working life can be beneficial to some, and not to others. With trends of working life continuing past 70 years (Gratton & Scott, 2016; McClymont, 2017), it is important for employers and policy makers to understand how

to support older workers. Suicide rates amongst older adults continue to rise across the globe (Shah et al., 2015), with a marked increase in rural and remote areas (Page & Fragar, 2002). Unemployment, varying socio-economic status, financial adversity (Handley, Inder, Kelly, Attia, Lewin, Fitzgerald, et al., 2012), social isolation (Renwick et al., 1982; Gunn et al., 2012; Taylor et al., 2005; Handley et al., 2012; Cheung, Spittal, Pirkis, Yip, 2012), the stigma of mental illness preventing help seeking behaviours (Judd et al., 2006a, 2006b; Alston, 2012; Guiney, 2012; Handley et al., 2013; Mc Phedran & De Leo, 2013) and changes in the rural environment are leading to increased psychological and physical distress (Alston, 2012; Mc Phedran & De Leo, 2013; Judd et al., 2006b; Gunn et al., 2012; Handley et al., 2012 Druce, 2017).

All employers (rural and urban) need to be mindful of their employees with regards to how much lead time is needed to make a successful transition into retirement. Coupled with a change in cultural expectations regarding older workers and a reframing of the mindset that all older workers want to retire early. This does not place value on the experience that an older worker has and the bank of knowledge that is possessed by those years of experience. In fact, this has the reverse effect on both the employer and the employee.

To reduce the amount of deaths by suicide in older adults in future years, retirement policies need to be reviewed and changed to accommodate everyone's circumstances, rather than a year of birth basis, using an appropriate evaluation tool that incorporates the Bio Psycho Social Model of health. With already recorded high rates of suicide in Baby Boomers across the world, this trend will only escalate for future generations of Australians and generations living in similar Western countries.

With predictions of continuing drought, and access to retirement benefits increasing to 70 years of age in Australia, future retirees need a greater level of assistance in preparing for retirement.

Chapter 9: Recommendations

This body of research investigated the relationship between the retirement experience and suicidal behaviour in older rural residents highlighting many areas where policies and practices could be altered to improve the retirement experience. Of notable importance are the Australian statistics reflecting older workers plans to retire at the age of 65.5 years, with 0.5 million people intending to retire in the following 5 years (ABS, 2019) for reasons cited as

- Reached retirement age or eligible for superannuation (46%).
 - Own sickness, injury or disability (21%)
 - Retrenched, dismissed or no work available (11%)
- (ABS, 2018).

In revisiting the main objectives of this study, how retirement can affect older rural Australians, psychosocial wellbeing is an important consideration for quality of life, given the rapid changes and adjustments needed as deterioration in physical capacity, including mobility, vision and hearing declines (Kubler-Ross, 1974; Rooth, 2017). Such deterioration can influence quality of life, and for some to consider whether life is worth living (Myles et al., 2017), while others are resilient to these changes (Principi et al., 2018) with heterogeneity across the community (WHO, 2002). How and for whom vulnerability to suicide occurs is an important initial step in accurately targeting suicide prevention activities for this older group (Reifels et al., 2017).

This chapter will focus on presenting **five specific recommendations** to current government policy and practices. These have been informed by the participants from this research project, as well as previous research in this area. Each recommendation has an estimated timeframe and indication of the possibility of implementing the changes.

1. **Employers to follow/ utilise a recommended stepped retirement approach** for employees, prior to anticipated retirement, including monitoring levels of resilience in relation to physical and psychological deterioration (pre-and post-retirement). This may mean reduced hours that enable potential retirees to gently leave the workforce or continue to stay on in the workforce for longer periods of time (Chapter 2, 3, & 6).

Method: An evaluation to be undertaken on the impact on mental and physical wellbeing of formal transition to retirement programs compared to no formal transition to retirement among rural older people from a variety of geographic settings across rural Australia.

Timeframe: It would be reasonable to expect that with funding, a project could be started within the next 12 months and completed within 2 – 3 years

2. Further exploration of risk and protective factors that reduce the risk of suicidal behaviours in older rural people. In line with the Suicide Prevention Research Fund (SPRF) priorities 1 & 2, the project would explore the factors around transition to retirement that are protective of mental and physical wellbeing (Reifels et.al., 2017, potentially reducing the risk of suicidal behaviour.

Method: A survey could be co-designed with a focus groups of rural older people with lived experience of suicide (sought through partnerships), designed and piloted to examine variables related with suicide, distress and vulnerability. To understand the role of planned versus non-planned retirement in relation to resultant distress and identify points where future interventions can best be targeted.

Timeframe: Within the next 2 – 5 years

This could be completed as a Post-Doctoral Research program, with adequate funding, and partnering with a regional university and national rural health organisations.

3. To develop, pilot and implement a program that can assist older people in preparing for, and identifying, potentially harmful vulnerabilities prior to them occurring and planning accordingly. This will have broad application for retirement planning for rural older people and the surrounding community. This evidence based model could assist employers/stakeholders to consider how careful planning can reduce distress at retirement transitions, and support this cohort who are vulnerable to isolation, loss, and despair. In turn, supporting them through the transition of retirement, (encouraging access to social supports, financial assistance,

relationship counselling, understanding the psychological and biological changes that may occur post working life (Joiner, 2005).

Method: Using the recommendations from the qualitative interviews, and the information from the evaluation study with formal and informal retirement programs, a pilot program should be created featuring pathways to suicide prevention in retirement that can be implemented and tested across rural industries by a variety of employers and businesses.

Timeframe: Within the next 2 – 5 years

This could be completed as a Post-Doctoral Research program, with adequate funding, and partnering with a regional university and national rural health organisations.

4. The Australian government to conduct investigative analysis into the development of a “Safety Net” for older Australians:

As Rice recommended in 1998 there was a need for a Safety Net for older people experiencing financial difficulty prior to retirement (Rice, 1998). In reviewing this recommendation 20 years later (Rice, 2018), the safety net remains absent (Chapter 1).

Method: Australian government to conduct investigative analysis into this Safety Net in partnership with organisations such as COTA (2019) and representatives from other ageing peak bodies, such as the Australian Association of Gerontology (AAG, 2020).

Timeframe: Within the next 5 years to assist with the current ageing population in Australia.

With the correct levels of executives in place, discussions could be made at state level, a white paper could be created and sent to the local minister for discussion and elevation.

5. Increased access to mental health services in rural Australia and provision of adequate and visible community services, with appropriately trained professional staff (understanding of issues

facing older rural families) and access to appropriate crisis health services (reduced waiting lists and increased ‘farm gate’ counselling). (Chapter 2 & 7). The rural participants and rural stakeholders in this project discussed the benefits of counselling, including financial counselling, to assist them with the transition into retirement. There is a recognised need for services such as Rural Financial Counselling Services and Farm Gate Counsellors (National Farmer’s Federation, 2018) to have their funding increased. In 2020, the Australian government increased the budget for Rural Financial Counselling Services by \$15 Million to assist primary producers with the psychological effects of living with long term drought. More recently, widespread bushfires and Covid 19 have impacted on rural dwelling adults, reinforcing the need for increased monitoring and referral to psycho social support services that are embedded in the preferred Farm Gate approach. (Department of Agriculture, Water and The Environment (DAWR), 2020).

Method: Organisations where the funding is distributed could access data on referrals to rural counsellors, monitor and evaluate programs, and initiate requests for further funding.

Timeframe: This could be completed towards the end of the funding round, or prior to, with allocations of funding that were not accessed, re distributed to other areas in greater need, prior to the end of the funding contract.

References

- Abbott, J., Lim, M., Eres, R., Long, K., & Mathews, R. (2018). *The impact of loneliness on the health and wellbeing of Australians*. The Australian loneliness report. The Australian Psychological Society. Monash University. Retrieved: <https://research.monash.edu/en/publications/the-impact-of-loneliness-on-the-health-and-wellbeing-of-australia>
- Aday, L.A. (2002). *At risk in America: The health and health care needs of vulnerable populations in the United States*: John Wiley & Sons; 2002. February 28.
- Ahmat, N., (Host) Connellan, M., (Reporter) Diamond, M., (Contributor) & Lavery, M. (Contributor). (2018, January 23). The Royal Flying Doctor Service claims mental health services in rural and remote Australia are in a state of crisis. *World News Australia* (SBS Television).
- Alcoholics Anonymous (2019) *Alcoholics Anonymous*. Retrieved from: <https://aa.org.au/>
- AEGON (2018). *Aegon retirement readiness survey 2018 – a new social contract*. June 06, 2018. Retrieved from <https://www.aegon.com/research/reports/annual/aegon-retirement-readiness-survey-2018-a-new-social-contract/>
- Allan, J., Ball, P., & Alston, M. (2010). What is health anyway? Perceptions and experiences of health and health care from socio-economically disadvantaged rural residents. *Rural Society*, 20(1), 85-97.
- Alston, M. (2007). Gender and climate change: Variable adaptations of women and men. *Just Policy: A Journal of Australian Social Policy*, (46), 29–35.
- Alston, M. (2012). Rural male suicide in Australia. *Social Science & Medicine*, 74(4), 515–522. <https://doi.org/10.1016/j.socscimed.2010.04.036>
- American Foundation for Suicide Prevention (AFSP). Suicide statistics. Retrieved from: <https://afsp.org/suicide-statistics/>
- Applewhite, A. (2015). How I became an old person in training. *Generations*, 39(3), 64–67. Retrieved from <http://search.proquest.com/docview/1750054630/>
- Arnautovska, U., McPhedran, S., & Leo, D. (2013). A regional approach to understanding farmer suicide rates in Queensland. *Social Psychiatry and Psychiatric Epidemiology*, 49 (4), 593–599. <https://doi.org/10.1007/s00127-013-0777-9>
- Australian Association of Gerontology (AAG) (2020) *Australian Association of Gerontology. Connecting research, policy and practice*. Retrieved from:

<https://www.aag.asn.au/>

Australian Bureau of Statistics. (ABS). (2013) *Causes of death Online, Australia* (no. 3303.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2013~Main%20Features~Key%20Characteristics~10009>

Australian Bureau of Statistics. (ABS). (1998). History of pensions and other benefits in Australia, Year Book Australia, 1988. (1301.0). Retrieved from: <https://www.abs.gov.au/ausstats/abs@.nsf/94713ad445ff1425ca25682000192af2/8e72c4526a94aaedca2569de00296978!opendocument>

Australian Bureau of Statistics. (ABS). (2015). *Retirement and retirement intentions, Australia, July 2014 – 2015*(no. 6238.0). Retrieved from <https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/FC6D6FFAD7B699D8CA2581F9007DB7B2?opendocument>

Australian Bureau of Statistics. (ABS). (2017) *Land management and farming in Australia, 2016-2017, Australia* (no. 4627.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4627.0>

Australian Bureau of Statistics. (ABS). (2017) *Causes of death, Australia, 2017. Intentional self-harm, key characteristic, Australia* (no.3303.0). Retrieved from: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2017~Main%20Features~Intentional%20self-harm,%20key%20characteristics~3>

Australian Bureau of Statistics. (ABS). (2017). *Population projections, Australia* (no. 3222.0) Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/3222.0>

Australian Bureau of Statistics. (ABS). (2017). *Retirement and retirement intentions Report, Australia, July 2016 – June 2017* (no.6238.0). Retrieved from (<http://www.abs.gov.au/ausstats/abs@.nsf/mf/6238.0>)

Australian Bureau of Statistics. (ABS). (2018). *Retirement and retirement intentions Report, Australia, 2018-19* (no.6238.0). Retrieved from <https://www.abs.gov.au/ausstats/abs@.nsf/mf/6238.0>

Australian Bureau of Statistics. (ABS). (2019). *How does the ABS define urban and rural? Australia*. Retrieved from <http://www.abs.gov.au/websitedbs/d3310114.nsf/home/frequently+asked+questions#Anchor7>.

Australian Government. Federal Register of Legislation (1992). *Federal register of legislation. Superannuation guarantee (Administration) Act. No.111, 1992*. Retrieved from <https://www.legislation.gov.au/Details/C2017C00230>

- Australian Government. (2015). *2015 Intergenerational report: Australia in 2055*. Retrieved from: https://treasury.gov.au/sites/default/files/2019-03/2015_IGR.pdf
- Australian Government. (2019). *Federal register of legislation. Invalid and old aged pensions act, 1908. No. 17 of 1908. An act to provide for the payment of invalid and old-age pensions and for other purposes* (Assented to 10th June, 1908) Retrieved from: <https://www.legislation.gov.au/Details/C1908A00017>
- Australian Government (NMHC) (2016) National Mental Health Commission. *An overview of the findings and recommendations of contributing lives, thriving communities, Volume 1: Strategic directions, practical solutions 1 – 2 years*. Retrieved from: <http://www.mentalhealthcommission.gov.au/our-reports/our-national-report-cards/2014-contributing-lives-review.aspx>
- Australian Institute of Health and Welfare. (AIHW). (2017). *Older Australia at a glance: Australia, 2017* (No publication number). Retrieved from <https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/demographics-of-older-australians/australia-s-changing-age-and-gender-profile>
- Australian Institute of Health and Welfare. (AIHW) (2017). *Rural and remote health*. Web Report (No publication number). Retrieved from <https://www.aihw.gov.au/reports/rural-health/rural-remote-health/contents/rural-health>
- Australian Institute of Health and Welfare. (AIHW) (2018a). *Australia's health 2018* (Australia's Health Series no.16) Retrieved from <https://www.aihw.gov.au/getmedia/7c42913d-295f-4bc9-9c24-4e44eff4a04a/aihw-aus-221.pdf.aspx?inline=true>.
- Australian Institute of Health and Welfare. (AIHW). (2018b). *National suicide monitoring of serving and ex-serving Australian Defence Force personnel: 2018 update*. (No publication number). Retrieved from <https://www.aihw.gov.au/reports/veterans/national-veteran-suicide-monitoring/contents/summary>
- Australian Institute of Health and Welfare. (AIHW) (2019). *Rural and remote health 2017* (No Publication number) Retrieved from <https://www.aihw.gov.au/reports/rural-health/rural-remote-health/contents/deaths-remoteness>.
- Australian Institute of Health and Welfare. (AIHW) (2020). *Rural and remote Australians*. Links & other information. Retrieved from: <https://www.aihw.gov.au/rural-health-rrma->

classification#:~:text=The%20term%20'rural%20and%20remote,regional%2C%20Remote%20or%20Very%20remote.

- Australian Men's Shed Association. (2016, August). *Evaluation of the Australian men's shed association. Summary report, Siggins Miller, Final, 31st August 2016*. Retrieved from:
<https://mensshed.org/wp-content/uploads/2016/09/AMSAEVALUATION-SUMMARY-REPORT-FINAL.pdf>
- Beckmann, K. R., Bennett, A., Young, G. P., & Roder, D. M. (2014). Treatment patterns among colorectal cancer patients in South Australia: a demonstration of the utility of population-based data linkage. *Journal of evaluation in clinical practice*, 20(4), 467-477.
- Bishop, L., Ransom, A., Laverty, M., & Gale, L. (2017). *Mental health in remote and rural communities. Research Report*. Royal Flying Doctor Service. Retrieved from:
https://rfd-media.s3.amazonaws.com/documents/RN031_Mental_Health_D5.pdf?Expires=1592020232&AWSAccessKeyId=AKIA57J6V557HP5WJ6WZ&Signature=tfHs7Gs3mzGxc56TRnOd3zbXpUg%3D
- Black Dog Institute (2020). *Facts about suicide in Australia*. Suicide has a devastating impact on families, friends and whole communities. Retrieved from: <https://www.blackdoginstitute.org.au/resources-support/suicide-self-harm/facts-about-suicide-in-australia/>
- Blazer, D. G., Bachar, J. R., & Manton, K. G. (1986). Suicide in late life: review and commentary. *Journal of the American Geriatrics Society*, 34(7), 519-525.
- Bleidorn, W., & Schwaba, T. (2018). Retirement is associated with change in self-esteem. *Psychology and Ageing*, 33(4), 586–594.
<https://doi.org/10.1037/pag0000253>
- Boissonneault, M., & De Beer, J. (2018). Work ability trajectories and retirement pathways: A longitudinal analysis of older American workers. *Journal of Occupational and Environmental Medicine*, 60(7), e343–e348.
<https://doi.org/10.1097/JOM.0000000000001353>.
- Bonnewyn, A., Shah, A., & Demyttenaere, K. (2009). Suicidality and suicide in older people. *Reviews in Clinical Gerontology*, 19(4), 271–294.
<https://doi.org/10.1017/S0959259809990347>
- Bourke, L. (2003). Toward understanding youth suicide in an Australian rural community. *Social Science & Medicine*, 57(12), 2355–2365.
[https://doi.org/10.1016/S0277-9536\(03\)00069-8](https://doi.org/10.1016/S0277-9536(03)00069-8)

- Brent, D., & Bridge, J. (2003). Firearms Availability and Suicide: Evidence, Interventions, and Future Directions. *American Behavioural Scientist*, 46(9), 1192–1210. <https://doi.org/10.1177/0002764202250662>
- Burvill, P. W., McCall, M. G., Stenhouse, N. S., & Woodings, T. L. (1982). The relationship between suicide, undetermined deaths and accidental deaths in the Australian born and migrants in Australia. *Australian and New Zealand Journal of Psychiatry*, 16(3), 179-184.
- Butterworth, P., Gill, S. C., Rodgers, B., Anstey, K. J., Villamil, E., & Melzer, D. (2006). Retirement and mental health: analysis of the Australian national survey of mental health and wellbeing. *Social Science & Medicine*, 62(5), 1179-1191.
- Bureau of Meteorology (BOM) (2018). Rainfall deficiencies in Australia (Image) Retrieved from <http://www.bom.gov.au/climate/current/month/aus/archive/201704.summary.html>
- Buys, L., Roberto, K., Miller, E., & Blieszner, R. (2008). Prevalence and predictors of depressive symptoms among rural older Australians and Americans. *Australian Journal of Rural Health*, 16(1), 33–39. <https://doi.org/10.1111/j.1440-1584.2007.00948.x>
- Byles, J., Vo, K., Forder, P., Thomas, L., Banks, E., Rodgers, B., & Bauman, A. (2016). Gender, mental health, physical health and retirement: A prospective study of 21,608 Australians aged 55–69 years. *Maturitas*, 87, 40–48. <https://doi.org/10.1016/j.maturitas.2016.02.011>
- Caldwell, T., Jorm, A., & Dear, K. (2004). Suicide and mental health in rural, remote and metropolitan areas in Australia. *Medical Journal of Australia*, 181, S10–S14. <https://doi.org/10.5694/j.1326-5377.2004.tb06348.x>
- Carriere, Y., & Galarneau, D. (2011). Delayed retirement: a new trend? *Perspectives on Labour and Income*, 23(4)
- Caulkin, S. (2016). The 100-year life: gift or curse? *London Business School Review*, 27(3), 36–39. <https://doi.org/10.1111/2057-1615.12139>
- Centre of Excellence in Population Ageing Research. (CEPAR). (2018) *ARC Centre of Excellence in Population Ageing Research. Measuring up? International indices of ageing*. Retrieved from: http://cepar.edu.au/sites/default/files/2018_FS_Measuring_Up_International_Indices_of_Ageing_0.pdf
- Chanda, S., & Mishra, R. (2019). Impact of transition in work status and social participation on cognitive performance among elderly in India. *BMC Geriatrics*, 19(1), 251. <https://doi.org/10.1186/s12877-019-1261-5>

- Centre for Rural and Remote Mental Health. (CRRMH) (2017). *Rural suicide and its prevention: ACRRMH position paper*. Newcastle: Australia. Retrieved from: https://www.crrmh.com.au/content/uploads/RuralSuicidePreventionPaper_2017_WEB_FINAL.pdf.
- Cheung, Y., Spittal, M., Pirkis, J., & Yip, P. (2012). Spatial analysis of suicide mortality in Australia: Investigation of metropolitan-rural-remote differentials of suicide risk across states/territories. *Social Science & Medicine*, 75(8), 1460–1468. <https://doi.org/10.1016/j.socscimed.2012.04.008>
- Cicirelli, V. (2001). Personal meanings of death in older adults and young adults in relation to their fears of death. *Death Studies*, 25(8), 663–683. <https://doi.org/10.1080/713769896>
- Coates, B. (2018). What's the best way to close the gender gap in retirement incomes? Grattan Institute Working Paper no. 2018-01, February 2018. Retrieved from: <https://grattan.edu.au/wp-content/uploads/2018/02/899-Best-way-to-close-gender-gap-retirement-incomes.pdf>
- Conejero, I., Olié, E., Courtet, P., & Calati, R. (2018). Suicide in older adults: current perspectives. *Clinical Interventions in Ageing*, 13, 691.
- Conwell, Y. (2017). Scientific autobiography. *The American Journal of Geriatric Psychiatry*, 25(11), 1281–1286. <https://doi.org/10.1016/j.jagp.2017.07.015>
- Costello, P. (2004). *Australia's demographic challenges*, Commonwealth of Australia Treasury Paper, Canberra. Retrieved from <https://treasury.gov.au/review/australias-demographic-challenges>
- Council on the Ageing (COTA). (2018). *What matters to you? Engagement Report 2018 COTA NSW Consumer Reference Groups*. Retrieved from <https://www.cotansw.com.au/council-on-the-ageing-nsw-news-and-events-details/engagement-report-2018>.
- Crabtree, B. F., & Miller, W. L. (1992). Doing qualitative research. In *Annual North American Primary Care Research Group Meeting, 19th, May 1989, Quebec, PQ, Canada*. Sage Publications, Inc.
- Critical Skills Appraisal Program. (CASP) (2015) *Checklist for qualitative studies*. Oxford, UK. Retrieved from: <http://www.casp-uk.net/#!/checklists/cb36>
- Critical Skills Appraisal Program. (CASP). (2018) *Critical Skills Appraisal Program. Systematic review checklist 2018*. Retrieved from: https://casp-uk.net/wp-content/uploads/2018/01/CASP-Systematic-Review-Checklist_2018.pdf
- Crnek-Georgeson, K. T., Wilson, L. A., & Page, A. (2017). Factors influencing suicide in older rural males: a review of Australian studies. *Rural & Remote Health*, 17(4). <https://doi.org/10.22605/RRH4020>

- Cukrowicz, K., Cheavens, J., Van Orden, K., Ragain, R., & Cook, R. (2011). Perceived burdensomeness and suicide ideation in older adults. *Psychology and Ageing*, 26(2), 331–338. <https://doi.org/10.1037/a0021836>
- de Mendonça Lima, C., & Ivbijaro, G. (2019). *Primary care mental health in older people a global perspective* (1st ed. 2019.). <https://doi.org/10.1007/978-3-030-10814-4>
- Dennis, H., & Fike, K. (2012). Retirement planning. In *the Oxford handbook of work and ageing*. <https://doi.org/10.1093/oxfordhb/9780195385052.013.0159>
- Department of Agriculture, Water and the Environment (DAWR) (2020). Rural Financial Counselling Service (RFCs). Retrieved from: <https://www.agriculture.gov.au/ag-farm-food/drought/assistance/rural-financial-counselling-service>
- Department of Defence. (DOD) (2019). *Health rehabilitation and recovery directory, Australia*. Retrieved from: <http://www.defence.gov.au/Health/HealthPortal/ESOMap.asp>
- Department of Health. (DOH) (2011). *People living with psychotic illness 2010 5. Suicidality*. Retrieved from: <https://www1.health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-p-psych10-toc~mental-pubs-p-psych10-5>
- Department of Health and Ageing. (DOHA) (2008). *LIFE - livingisforeveryone.com.au A framework for prevention of suicide in Australia*. Report No. P3 -2060. Canberra: Commonwealth of Australia, 2008.
- Department of Health and Ageing. *Living is For Everyone*. 2016. Available: <http://www.livingisforeveryone.com.au/Projects.html?cat=124#23>
- Department of Primary Industries. (DPI). (2018). *NSW state seasonal update, June 2018* (DPI NSW, 2018) Retrieved from <https://www.dpi.nsw.gov.au/climate-and-emergencies/droughthub/information-and-resources/seasonal-conditions/ssu/june-2018>
- Department of Primary Industries. (DPI). (2019) *NSW state seasonal update – May 2019*. (DPI, 2019). Retrieved from: <https://www.dpi.nsw.gov.au/climate-and-emergencies/>
- Department of Primary Industries. (DPI). (2019) *NSW State Seasonal Update –May 2019*. Retrieved from: <https://www.dpi.nsw.gov.au/climate-and-emergencies/droughthub/information-and-resources/seasonal-conditions/ssu/may-2019>
- Department of Veterans Affairs. (DVA). (2016). *Suicidal behaviour and ideation among military personnel: Australian and international trends*. Summary

report prepared for the Department of Veterans' Affairs. Australian Institute for Suicide Research and Prevention. Retrieved from:
<https://www.dva.gov.au/health-and-wellbeing/research-and-development/health-studies/suicidal-behaviour-and-ideation-among>

- De Leo, D. (2007). Suicide mortality data need revision. *Medical Journal of Australia*, 186(3), 157–158. <https://doi.org/10.5694/j.1326-5377.2007.tb00845.x>
- De Leo, D., Dudley, M., Aebersold, C., Mendoza, J., Barnes, M., Harrison, J., & Ranson, D. (2010). Achieving standardised reporting of suicide in Australia: rationale and program for change. *Medical Journal of Australia*, 192(8), 452–456. <https://doi.org/10.5694/j.1326-5377.2010.tb03584.x>
- De Leo, D., Dwyer, J., Firman, D., & Neulinger, K. (2003). Trends in hanging and firearm suicide rates in Australia: Substitution of Method? *Suicide and Life - Threatening Behaviour*, 33(2), 151–164. <https://doi.org/10.1521/suli.33.2.151.22775>
- De Leo, D., Hickey, P. A., Neulinger, K., & Cantor, C. H. (2001). Ageing and suicide. *Canberra: Commonwealth Department of Health and Aged Care*.
- Dingle, S. (2018, May 4). *Murray-Darling water licence rethink putting farmers' mortgages in question, experts warn*. ABC News. Retrieved from <https://www.abc.net.au/news/2018-05-04/property-mortgages-in-the-murray-darling-basin-in-question/9722894>
- Downey, H., Threlkeld, G., & Warburton, J. (2017). What is the role of place identity in older farming couples' retirement considerations? *Journal of Rural Studies*, 50, 1–11. <https://doi.org/10.1016/j.jrurstud.2016.12.006>
- Druce, A. (2017, December 7) *The way we respond to rural suicide is not working*. The Land. Retrieved from: <https://www.theland.com.au/story/5104598/rural-suicide-rate-more-than-50-per-cent-above-the-cities/>
- Dudley, M., O'Neil, D., Koivo, W., Graham, K., Chapman-Mosh, J., Mendoza, J., Duff, L., & Mc Glaughlin, R. (2009). *Let's get serious: The infrastructure to effectively address suicide in Australia*. A submission to the Senate Community Affairs Committee Inquiry on suicide in Australia The Suicide Prevention Taskforce & Suicide Prevention Australia Inc., 12/11/09. (No Report Number provided). Retrieved from:
https://webcache.googleusercontent.com/search?q=cache:XjBpVoASQWwJ:hhttps://www.aph.gov.au/~media/wopapub/senate/committee/clac_ctte/completed_inquiries/2008_10/suicide/submissions/sub121_pdf.ashx+&cd=1&hl=en&ct=clnk&gl=au
- Eades, A., Segal, D., & Coolidge, F. (2019). Suicide risk factors among older adults: Exploring thwarted belongingness and perceived burdensomeness in relation to personality and self-esteem. *The International Journal of Ageing and*

Human Development, 88(2), 150–167.
<https://doi.org/10.1177/0091415018757214>

Eagers, J., Franklin, R., Yau, M., & Broome, K. (2018). Review of pre-retirement job and the work-to-retirement occupational transition process in Australia: A review. *Australian Occupational Therapy Journal*, 65(4), 314–328.
<https://doi.org/10.1111/1440-1630.12452>.

Eismann, M., Verbeij, T., & Henkens, K. (2019). Older workers' plans for activities in retirement: The role of opportunities, spousal support, and time perception. *Psychology and Ageing*, 34(5), 738–749. <https://doi.org/10.1037/pag0000377>

Erlangsen, A., Bille-Brahe, U., Jeune, B., & Erlangsen, A. (2003). Differences in suicide between the old and the oldest old. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 58(5), S314–S322.
<https://doi.org/10.1093/geronb/58.5.S314>

Everingham, C., Warner-Smith, P., & Byles, J. (2007). Transforming retirement: Rethinking models of retirement to accommodate the experiences of women. *Women's Studies International Forum*, 30(6), 512–522.
<https://doi.org/10.1016/j.wsif.2007.09.006>

Fairley, J. (2013, November 11). *Retirement is a fantasy for many*. National Underwriter Life and Health Breaking News. Retrieved from:
<http://link.galegroup.com/apps/doc/A348738715/ITOF?u=usyd&sid=ITOF&xid=bc5d822f>.

Fernandez, A., Black, J., Jones, M., Wilson, L., Salvador-Carulla, L., Astell-Burt, T., Fernandez, A. (2015). Flooding and mental health: a systematic mapping review. *PloS One*, 10(4), e0119929–e0119929.
<https://doi.org/10.1371/journal.pone.0119929>

Flaskerud, J., & Winslow, B. (1998). Conceptualizing vulnerable population's Health-related research. *Nursing Research*, 47(2), 69–78.
<https://doi.org/10.1097/00006199-199803000-00005>

Flaskerud, J., & Winslow, B. (2010). Vulnerable populations and ultimate responsibility. *Issues in Mental Health Nursing*, 31(4), 298–299.
<https://doi.org/10.3109/01612840903308556>

Fragar, L., Inder, K., Kelly, B., Coleman, C., Perkins, D., & Lewin, T. (2013). Unintentional injury, psychological distress and depressive symptoms: Is there an association for rural Australians? *Journal of Rural Health*, 29(1), 12–19.
<https://doi.org/10.1111/j.1748-0361.2012.00423.x>

Fraser, C., Smith, K., Judd, F., Humphreys, J., Fragar, L., & Henderson, A. (2005). Farming and mental health problems and mental illness. *International Journal of Social Psychiatry*, 51(4), 340–349.
<https://doi.org/10.1177/0020764005060844>

Fujitsu. (2019). Fujitsu Shaping tomorrow with you. *Transition to Retirement Policy*.

- Fulmer, T. (2016) *Eradicating ageism is a moral imperative*. The John A. Hartford Foundation Dedicated to improving the care of older adults. Retrieved from <https://www.johnahartford.org/blog/view/eradicating-ageism-is-a-moral-imperative/>
- Garnaut, R. (2011). *Garnaut Climate Change Review – Update 2011. Australia in the global response to climate change summary*. Retrieved from <http://www.garnautreview.org.au/update-2011/garnaut-review-2011/summary-20June.pdf>
- Genoe, M., Liechty, T., & Marston, H. (2018). Retirement transitions among Baby Boomers: Findings from an online qualitative study. *Canadian Journal on Ageing / La Revue Canadienne Du Vieillissement*, 37(4), 450–463. Retrieved from <https://muse.jhu.edu/article/708691>
- Gong, C., & Kendig, H. (2018). Impacts of voluntary and involuntary workforce transitions at mature ages: Longitudinal evidence from HILDA. *Australasian Journal on Ageing*, 37(1), 11–16. <https://doi.org/10.1111/ajag.12468>
- Goodwin, J., & O'Connor, H. (2014). Notions of fantasy and reality in the adjustment to retirement, 34(4), 569–589. <https://doi.org/10.1017/S0144686X12001122>
- Grace, S., Higgs, J., & Ajjawi, R. (2009). Writing phenomenologically. In *Writing qualitative research on practice* (pp. 115-126). Brill Sense.
- Gratton, L., & Scott, A. (2016). *The 100-year life: living and working in an age of longevity*. London, UK; Bloomsbury Information, an imprint of Bloomsbury Publishing Plc.
- Gratton, L., & Scott, A. (2017). The 100 Year Life. Gift or Curse? *London Business School Review*, 27(3), 36–39. <https://doi.org/10.1111/2057-1615.12139>
- Gratton, L., & Scott, A. (2017). *The corporate implications of longer lives*. MIT Sloan Management Review. Spring 2017 Issue. Research Feature. Retrieved from: https://sloanreview.mit.edu/article/the-corporate-implications-oflongerlives/?social_token=4cb2f7585cb03f57803043f021c6bd01&utm_source=twitter&utm_medium=social&utm_campaign=sm-direct
- Guiney, R. (2012). Farming suicides during the Victorian drought: 2001–2007. *Australian Journal of Rural Health*, 20(1), 11–15. <https://doi.org/10.1111/j.1440-1584.2011.01244.x>
- Guillemard, A. M. (2005). The advent of a flexible life course and the reconfigurations of welfare. *The changing face of welfare: consequences and outcomes from a citizenship perspective*. Bristol: Policy Press Scholarship Online, 55-73.

- Guise, J. M., O'Haire, C., Mc Pheeters, M., Most, C., La Brant, L., Lee, K., ... & Graham, E. (2013). A practice-based tool for engaging stakeholders in future research: a synthesis of current practices. *Journal of clinical epidemiology*, 66(6), 666-674.
- Gunn, K., Kettler, L., Skaczkowski, G., & Turnbull, D. (2012). Farmers' stress and coping in a time of drought. *Rural and Remote Health*, 12(4).
- Handley, T., Inder, K., Kelly, B., Attia, J., & Kay-Lambkin, F. (2011). Urban–rural influences on suicidality: Gaps in the existing literature and recommendations for future research. *Australian Journal of Rural Health*. Melbourne, Australia: Blackwell Publishing Asia. <https://doi.org/10.1111/j.1440-1584.2011.01235.x>
- Handley, T., Inder, K., Kelly, B., Attia, J., Lewin, T., Fitzgerald, M., & Kay-Lambkin, F. (2012). You've got to have friends: the predictive value of social integration and support in suicidal ideation among rural communities. *Social Psychiatry and Psychiatric Epidemiology*, 47(8), 1281–1290. <https://doi.org/10.1007/s00127-011-0436-y>
- Handley, T., Inder, K., Kay-Lambkin, F., Stain, H., Fitzgerald, M., Lewin, T., Kelly, B. (2012). Contributors to suicidality in rural communities: beyond the effects of depression. *BMC Psychiatry*, 12(1), 105. <https://doi.org/10.1186/1471-244X-12-105>
- Handley, T., Attia, J., Inder, K., Kay-Lambkin, F., Barker, D., Lewin, T., & Kelly, B. (2013). Longitudinal course and predictors of suicidal ideation in a rural community sample. *Australian & New Zealand Journal of Psychiatry*, 47(11), 1032–1040. <https://doi.org/10.1177/0004867413495318>
- Hanigan, I., Butler, C., Kokic, P., Hutchinson, M., & Hanigan, I. (2012). Suicide and drought in New South Wales, Australia, 1970-2007. *Proceedings of the National Academy of Sciences of the United States of America*, 109(35), 13950–13955. <https://doi.org/10.1073/pnas.1112965109>
- Hansson, I., Buratti, S., Johansson, B., & Berg, A. (2019). Beyond health and economy: resource interactions in retirement adjustment. *Ageing & Mental Health*, 23(11), 1546–1554. <https://doi.org/10.1080/13607863.2018.1506745>
- Hazell, T., Dalton, H., Caton, T., & Perkins. (2017) Rural suicide and its prevention” a CRRMH position paper. Centre for Rural and Remote Mental Health. University of Newcastle, Australia. Retrieved from: https://www.crrmh.com.au/content/uploads/RuralSuicidePreventionPaper_2017_WEB_FINAL.pdf
- Hegney, D. G., Buikstra, E., Baker, P., Rogers-Clark, C., Pearce, S., Ross, H., & Watson-Luke, A. (2007). Individual resilience in rural people: a Queensland study, Australia. *Rural and remote health*, 7(4), 1-13.

- Holzmann, R. (2013). Global pension systems and their reform: Worldwide drivers, trends and challenges. *International Social Security Review*, 66(2), 1–29. <https://doi.org/10.1111/issr.12007>
- Horsfall, D., & Pinn, J. (2009). Writing Collaboratively. In J. Higgs, D. Horsfall, and S. Grace (Eds.), *Writing Qualitative Research on Practice*. (Pp.207-215). The Netherlands: Sense Publishers.
- Horton, G., Hanna, L., & Kelly, B. (2010). Drought, drying and climate change: emerging health issues for ageing Australians in rural areas. *Australasian Journal on Ageing*, 29(1), 2-7.
- Hull, M. J., Fennell, K. M., Vallury, K., Jones, M., & Dollman, J. (2017). A comparison of barriers to mental health support-seeking among farming and non-farming adults in rural South Australia. *Australian Journal of Rural Health*, 25(6), 347-353.
- Humpel, N., O'Loughlin, K., Wells, Y., & Kendig, H. (2010). The health of Australian baby boomers. *Australasian Journal on Ageing*, 29(1), 8-13.
- Hunter, E., & Milroy, H. (2006). Aboriginal and Torres Strait Islander suicide in context. *Archives of Suicide Research*, 10(2), 141–157. <https://doi.org/10.1080/13811110600556889>
- Hurtado, M., & Topa, G. (2019). Quality of life and health: Influence of preparation for retirement behaviours through the serial mediation of losses and gains. *International Journal of Environmental Research and Public Health*, 16(9). <https://doi.org/10.3390/ijerph16091539>
- Inder, K., Handley, T., Johnston, A., Weaver, N., Coleman, C., Lewin, T., Kelly, B. (2014). Determinants of suicidal ideation and suicide attempts: parallel cross-sectional analyses examining geographical location. *BMC Psychiatry*, 14(1), 208. <https://doi.org/10.1186/1471-244X-14-208>
- International Labour Organisation. (ILO). (2014). *Social protection policy papers. Social protection for older persons: Key policy trends and statistics*. Retrieved from: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_310211.pdf
- Johnson, R., Butrica, B., & Mommaerts, C. (2010). Work and retirement patterns for the G.I. Generation, Silent Generation, and Early Boomers: Thirty years of change. *IDEAS Working Paper Series from RePEc*. Retrieved from <http://search.proquest.com/docview/1698258521/>
- Johnson. B.L. (2008) *Retirement*. In: Loue S.J., Sajatovic M. (Eds) *Encyclopaedia of ageing and public health*. Springer, Boston.
- Joiner, T. E. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

- Judd, F., Cooper, A-M., Fraser, C., & Davis, J. (2006a). Rural suicide—people or place effects? *Australian and New Zealand Journal of Psychiatry*, 40(3):208-16.
- Judd, F., Jackson, H., Fraser, C., Murray, G., Robins, G., & Komiti, A. (2006b). Understanding suicide in Australian farmers. *Social Psychiatry and Psychiatric Epidemiology*, 41(1), 1–10. <https://doi.org/10.1007/s00127-005-0007-1>
- Judd, F., Jackson, H., Komiti, A., Murray, G., Fraser, C., Grieve, A., & Gomez, R. (2006c). Help-seeking by rural residents for mental health problems: the importance of agrarian values. *Australian and New Zealand Journal of Psychiatry*, 40(9), 769–776. <https://doi.org/10.1080/j.1440-1614.2006.01882.x>
- Kail, B., & Carr, D. (2019). Structural social support and changes in depression during the retirement transition: “I Get by With a Little Help from My Friends”. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*. <https://doi.org/10.1093/geronb/gbz126>.
- Kendig, H. (2017). Australian developments in ageing: Issues and history. In O’Loughlin, K., Browning, C., & Kendig, H. (Eds.), *In Ageing in Australia. Challenges and Opportunities* (pp. 47-62). New York, USA: Springer Science and Business Media.
- Kennedy, A., Maple, M., McKay, K., Brumby, S., & Kennedy, A. (2014). Suicide and accidental death in Australia’s rural farming communities: a review of the literature. *Rural and Remote Health*, 14(1), 2517–2517. Retrieved from <http://search.proquest.com/docview/1534466262/>
- Keogh, D. U., Apan, A., Mushtaq, S., King, D., & Thomas, M. (2011). Resilience, vulnerability and adaptive capacity of an inland rural town prone to flooding: a climate change adaptation case study of Charleville, Queensland, Australia. *Natural Hazards*, 59(2), 699-723.
- Klapdor, M. (2014) Parliament of Australia, Department of Parliamentary Services, *Social Services and Other Legislation Amendment (Seniors Health Card and Other Measures) Bill 2014, Bills Digest No. 72*, 2013–14. Retrieved from https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/bd/bd1314a/14bd072
- Klieve, H., Barnes, M., & Leo, D. (2009). Controlling firearms use in Australia: has the 1996 gun law reform produced the decrease in rates of suicide with this method? *Social Psychiatry and Psychiatric Epidemiology*, 44(4), 285–292. <https://doi.org/10.1007/s00127-008-0435-9>
- Kölves, K., Milner, A., McKay, K., & De Leo, D. (2012). *Suicide in rural and remote areas of Australia*. Brisbane, Australia: Australian Institute for Suicide Research and Prevention.

- Kubler-Ross, E. (1974). *Questions and answers on death and dying*, New York: Collier Books, Macmillan Publishing Company.
- Kunde, L., Kelly, B., Reddy, P., & De Leo, D. (2017). Pathways to suicide in Australian farmers: A Life chart analysis. *International Journal of Environmental Research and Public Health*, 14(4).
<https://doi.org/10.3390/ijerph14040352>
- Kunde, L., Kølves, K., Kelly, B., Reddy, P., & De Leo, D. (2018). “The Masks We Wear”: A qualitative study of suicide in Australian farmers. *Journal of Rural Health*, 34(3), 254–262. <https://doi.org/10.1111/jrh.12290>
- Laberon, S., Grotz, C., Amieva, H., Pérès, K., & Vonthron, A. M. (2019). Psycho-social transition to retirement and adjustment to retired life: influence on wellbeing and mental health in retired farmers. *Ageing & Society*, 39(12), 2578-2604
- Lam, B., Haslam, C., Haslam, S., Steffens, N., Cruwys, T., Jetten, J., & Yang, J. (2018). Multiple social groups support adjustment to retirement across cultures. *Social Science & Medicine*, 208, 200–208.
<https://doi.org/10.1016/j.socscimed.2018.05.049>
- Laverty, S. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3), 21–35.
<https://doi.org/10.1177/160940690300200303>.
- Law, C., Snider, A., & De Leo, D. (2014). The influence of deprivation on suicide mortality in urban and rural Queensland: an ecological analysis. *Social Psychiatry and Psychiatric Epidemiology*, 49(12), 1919–1928.
<https://doi.org/10.1007/s00127-014-0905-1>
- Leight, S. (2003). The application of a vulnerable population’s conceptual model to rural health. *Public Health Nursing*, 20(6), 440–448.
<https://doi.org/10.1046/j.1525-1446.2003.20604.x>
- Liamputtong, P. (2007) Traditional interviewing research methods appropriate for researching vulnerable people. In *Researching the Vulnerable*. London: SAGE Publications, Ltd. <https://doi.org/10.4135/9781849209861.n5>
- Liamputtong, P. (2012). *Qualitative research methods* (4th Ed.). South Melbourne, Vic: Oxford University Press.
- Life in Mind (2020). Lived experience.
Retrieved from: <https://lifeinmindaustralia.com.au/about-suicide/lived-experience>
- Life Span. (2018). *Life Span integrated suicide prevention. New approach to suicide prevention to be implemented*. Retrieved from:

<https://lifespanmurrumbidgee.org.au/lifespan/2018/4/1/new-approach-to-suicide-prevention-to-be-implemented>

- Litwin, H., Achdut, L., & Youssim, I. (2009). Who supports delayed retirement? A study of older workers in Israel. *Journal of European Social Policy*, 19(3), 245–257. <https://doi.org/10.1177/0958928709104739>
- Liu, H., Fang, B., Chan, J., & Lou, V. (2019). Continued social participation protects against depressive symptoms across the retirement transition: Longitudinal evidence from three waves of the China Health and Retirement Longitudinal Survey. *Geriatrics & Gerontology International*, 19 (10), 972–976. <https://doi.org/10.1111/ggi.13752>
- Longhurst, M. (2018). *Enjoying retirement. An Australian handbook of ideas, strategies and resources*. Sydney, Australia: Hachette.
- Mänty, M., Kouvonen, A., Lallukka, T., Lahti, J., Lahelma, E., & Rahkonen, O. (2018). Changes in physical and mental health functioning during retirement transition: a register-linkage follow-up study. *European Journal of Public Health*, 28(5), 805–809. <https://doi.org/10.1093/eurpub/cky013>
- Mc Donald, P. (2017). Population ageing: A demographic perspective in O’Loughlin, K., Browning, C., & Kendig, H. (Eds.), In *Ageing in Australia. Challenges and Opportunities* (pp. 47-62). New York, USA: Springer Science and Business Media.
- Mc Gorry, P., & Hamilton, M. (2017). Broken promises and missing steps in mental health reform. *Medical Journal of Australia*, 206(11), 487–489. <https://doi.org/10.5694/mja17.00329>
- Mc Clymont, G. (2017). Gregg Mc Clymont: Planning for the 100-year life. *Money Marketing (Online)*. Retrieved from <https://search.proquest.com/docview/1862660072/>
- Mc Phedran, S., & De Leo, D. (2013). Miseries suffered, unvoiced, unknown? Communication of suicidal intent by men in “rural” Queensland, Australia. *Suicide and Life-Threatening Behaviour*, 43(6):589-97.
- Mein, G., Martikainen, P., Hemingway, H., Stansfeld, S., & Marmot, M. (2003). Is retirement good or bad for mental and physical health functioning? Whitehall II longitudinal study of civil servants. *Journal of Epidemiology & Community Health*, 57(1), 46-49.
- Mercer (2019) *Singapore set to hike retirement, re-employment ages*. <https://www.mercer.com/our-thinking/law-and-policy-group/singapore-set-to-hike-retirement-employment-ages.html>
- Melbourne Mercer. (2019). *Melbourne Mercer global pension index, 2019*. Mercer, Monash University, Monash Business School, Melbourne, Victoria, Australia.

Retrieved from: <https://info.mercer.com/rs/521-DEV-513/images/MMGPI%202019%20Full%20Report.pdf>

Mercer. (2016). *Melbourne Mercer global pension index. Including impact of ageing populations. October 2017*. Melbourne, Victoria, Australia.

Retrieved from: <https://www.mercer.no/our-thinking/merc-melbourne-global-pension-index.html>

Midgley, J. (2012). Social protection and the elderly in the developing world: mutual aid, micro-insurance, and the state. *Journal of Comparative Social Welfare*, 28(2), 153–163. <https://doi.org/10.1080/17486831.2012.655985>

Milner, A., Niven, H., Page, K., & La Montagne, A. (2015). Suicide in veterinarians and veterinary nurses in Australia: 2001–2012. *Australian Veterinary Journal*, 93(9), 308–310. <https://doi.org/10.1111/avj.12358>

Milner, A., Page, A., & La Montagne, A. D. (2013). Long-term unemployment and suicide: a systematic review and meta-analysis. *PloS one*, 8(1).

Milner, A., Spittal, M.J., Pirkis, J., & LaMontagne, A.D. (2013). Suicide by occupation: systematic review and meta-analysis. *British Journal of Psychiatry*, 203(6), 409–416. <https://doi.org/10.1192/bjp.bp.113.128405>

Microsoft (2017) *Excel Program. 2017*. Retrieved from: <https://www.microsoft.com/en-au>

Moffatt, S., & Heaven, B. (2017). Planning for uncertainty: Narratives on retirement transition experiences. *Ageing and Society*, 37(5), 879–898. <https://doi.org/10.1017/S0144686X15001476>

Morse, D. (2018). Annuities: The broccoli of retirement planning. *Benefits Law Journal*, 31(3), 1–4. Retrieved from <http://search.proquest.com/docview/2118765117/>

Myles, N., Large, M., Myles, H., Adams, R., Liu, D., & Galletly, C. (2017) Australia's economic transition, unemployment, suicide and mental health needs. *Australian and New Zealand Journal of Psychiatry*, 2017. Vol. 51 (2) 119 – 123. <https://doi.org/10.1177/0004867416675035>

National Farmers' Federation (2017). Food, fibre and Forestry Facts. A summary of Australia's agriculture sector. Retrieved from: <https://nff.org.au/wp-content/uploads/2020/01/171116-FINAL-Food-Fibre-Food-Facts.pdf>

National Farmers' Federation (2018) A comprehensive guide to available drought assistance options. Retrieved from <https://nff.org.au/media-release/a-comprehensive-guide-to-available-drought-assistance-options/>

National Rural Health Alliance. (2009). *Good health and wellbeing in rural and remote Australia*. Fact Sheet 14. Retrieved from:

http://ruralhealth.org.au/sites/default/files/fact-sheets/fact-sheet-14-suicide%20in%20rural%20australia_0.pdf

- National Rural Health Alliance. (NRHA). (2015) *Good health and wellbeing in rural and remote Australia*. Fact sheet14. Retrieved from: http://ruralhealth.org.au/sites/default/files/fact-sheets/fact-sheet-14-suicideinruralaustralia_0.pdf
- New South Wales Government, Agency for Clinical Innovation. (ACI). (2019) *Consumer Information*. Retrieved from: <https://www.aci.health.nsw.gov.au/>
- Newton, N., Chauhan, P., Spirling, S., & Stewart, A. (2019). Level of choice in older women's decisions to retire or continue working and associated wellbeing. *Journal of Women & Ageing*, 31(4), 286–303. <https://doi.org/10.1080/08952841.2018.1444947>
- Nicholls, N., Butler, C. D., & Hanigan, I. (2006). Inter-annual rainfall variations and suicide in New South Wales, Australia, 1964–2001. *International Journal of Biometeorology*, 50(3), 139-143.
- Nielson, L. (2010). Parliament of Australia, Department of Parliamentary Services. *Chronology of Superannuation and Retirement in Australia* (No Publication number) Parliamentary Library. Information, analysis and advice for the Australian government. 1 June 2010, 2009–10: Retrieved from: https://www.aph.gov.au/binaries/library/pubs/bn/eco/chron_superannuation.pdf
- Ng, R., Allore, H., Monin, J., & Levy, B. (2016). Retirement as meaningful: Positive retirement stereotypes associated with longevity. *Journal of Social Issues*, 72(1), 69–85. <https://doi.org/10.1111/josi.12156>
- Ng, F., Wilson, L., & Veitch, C. (2015). Climate adversity and resilience: the voice of rural Australia. *Rural and Remote Health*, 15(4), 3071.
- Nock, M., Borges, G., Bromet, E., Cha, C., Kessler, R., & Lee, S. (2008). Suicide and suicidal behaviour. *Epidemiologic Reviews*, 30(1), 133–154. <https://doi.org/10.1093/epirev/mxn002>
- Nyberg, A., Peristera, P., Magnusson Hanson, L., & Westerlund, H. (2019). Socio-economic predictors of depressive symptoms around old age retirement in Swedish women and men. *Ageing & Mental Health*, 23(5), 558–565. <https://doi.org/10.1080/13607863.2018.1430741>
- Olds, T., Burton, N.W., Sprod, J., Maher, C., Ferrar, K., Brown, W.J., Van Uffelen, J., Dumuid, D. (2018). One day you'll wake up and won't have to go to work: The impact of changes in time use on mental health following retirement. *PloS one*. 13(6): e0199605.
- Olsberg, D. (2005). Women, superannuation and retirement: Grim prospects despite policy changes. *Just Policy: A Journal of Australian Social Policy*, 35(31–38).

- Organisation for Economic Co-operation and Development (OECD). (2019). *Pensions at a glance 2019. OECD and G20 indicators*. November, 2019. Retrieved from: <https://www.oecd.org/social/oecd-pensions-at-a-glance-19991363.htm>
- Page, A., & Fragar, L. (2002). Suicide in Australian farming, 1988–1997. *Australian and New Zealand Journal of Psychiatry*, 36(1), 81–85. <https://doi.org/10.1046/j.1440-1614.2002.00975.x>
- Page, A., Morrell, S., & Taylor, R. (2002). Suicide differentials in Australian males and females by various measures of socio-economic status, 1994–98. *Australian and New Zealand Journal of Public Health*, 26(4), 318–324. <https://doi.org/10.1111/j.1467-842X.2002.tb00178.x>
- Page, A., Morrell, S., Taylor, R., Dudley, M., & Carter, G. (2007). Further increases in rural suicide in young Australian adults: Secular trends, 1979–2003. *Social Science & Medicine*, 65(3), 442–453. <https://doi.org/10.1016/j.socscimed.2007.03.029>
- Page, A., Milner, A., Morrell, S., & Taylor, R. (2013). The role of under-employment and unemployment in recent birth cohort effects in Australian suicide. *Social Science & Medicine*, 93, 155–162. <https://doi.org/10.1016/j.socscimed.2013.03.039>
- Page, A., Taylor, R., & Martin, G. (2010). Recent declines in Australian male suicide are real, not artefactual. *Australian & New Zealand Journal of Psychiatry*, 44(4), 358–363.
- Parliament of Australia. (2014). *Budget Review 2014-2015 Index, Changes to support for pensioners and retirees*. Retrieved from: http://www.aph.gov.au/about_parliament/parliamentary_departments/parliamentary_library/pubs/rp/budgetreview201415/pensioners
- Peavey, F. (2000). *Strategic questioning manual*. Retrieved from: <https://idp.cornell.edu/wp-content/uploads/2017/09/Strategic-Questioning-Manual-11b4d4l.pdf>
- Philip, L., Macleod, M., & Stockdale, A. (2013). Retirement transition, migration and remote rural communities: Evidence from the Isle of Bute. *Scottish Geographical Journal*, 129(2), 122–136. <https://doi.org/10.1080/14702541.2013.783616>
- Phillips, J., & O’Loughlin, K. (2017). Older workers and caregiving in a global context. *Journal of Cross-Cultural Gerontology*, 32(3), 283–289. <https://doi.org/10.1007/s10823-017-9328-2>

- Pit, S., & Hansen, V. (2014). Factors influencing early retirement intentions in Australian rural general practitioners. *Occupational Medicine*, 64(4), 297–304. <https://doi.org/10.1093/occmed/kqu028>
- Powell, N., Dalton, H.E., & Perkins, D. (2018). A collaborative approach to community wellbeing-a scoping review. Centre for Rural and Remote Mental Health, University of Newcastle. Retrieved from: https://www.crrmh.com.au/content/uploads/Review_A-collaborative-approach-to-community-mental-wellbeing_Final.pdf
- Principi, A., Smeaton, D., Cahill, K., Santini, S., Barnes, H., Socci, M. (2018). What happens to retirement plans, and does this affect retirement satisfaction? *The International Journal of Ageing and Human Development*. 90(2), 152–175. <https://doi.org/10.1177/0091415018796627>.
- Pritchard, C., & Baldwin, D. (2002). Elderly suicide rates in Asian and English-speaking countries. *Acta Psychiatrica Scandinavica*, 105(4), 271–275. <https://doi.org/10.1034/j.1600-0447.2002.1014.x>
- Qi, X., Hu, W., Page, A., & Tong, S. (2014). Dynamic pattern of suicide in Australia, 1986–2005: a descriptive-analytic study. *BMJ Open*, 4(7), e005311. <https://doi.org/10.1136/bmjopen-2014-005311>
- Qi, X., Tong, S., & Hu, W. (2009). Preliminary spatiotemporal analysis of the association between socio-environmental factors and suicide. *Environmental Health: A Global Access Science Source*, 8(1), 46. <https://doi.org/10.1186/1476-069X-8-46>
- Radermacher, H., & Feldman, S. (2015). “Health is their heart, their legs, their back”: understanding ageing well in ethnically diverse older men in rural Australia. *Ageing & Society*, 35(5), 1011–1031. <https://doi.org/10.1017/S0144686X14001226>
- Rajkumar, S., & Hoolahan, B. (2004). Remoteness and issues in mental health care: experience from rural Australia. *Epidemiology and Psychiatric Sciences*, 13(2), 78-82.
- Raphael, B., Taylor, M., Stevens, G., Barr, M., Gorringer, M., & Agho, K. (2009). Factors associated with population risk perceptions of continuing drought in Australia. *Australian journal of rural health*, 17(6), 330-337.
- Reconciliation Australia (2017). *Developing a reconciliation action plan*. Retrieved from <https://www.reconciliation.org.au/reconciliation-action-plans/faqs/>
- Reifels, L., Ftanou, M., Kryszynska, K., Machlin, A., Robinson, J., & Pirkis, J. (2017). Research priorities in Suicide Prevention. Final Report. The University of Melbourne. Retrieved from:

https://www.suicidepreventionaust.org/wp-content/uploads/2019/05/Research-priorities-Report-FINAL_2017-11-03_0.pdf

Renwick, M., Olsen, G., & Tyrrell, M. (1982). Suicide in rural New South Wales. Comparison with metropolitan experience. *Medical Journal of Australia*, 1(9), 377–380.

Research Australia (2018, May) *Accessibility and quality of mental health services in rural and remote Australia. Response to the Inquiry by the Senate Community Affairs References Committee*. (No publication number). Retrieved from: <https://researchaustralia.org/wp-content/uploads/2018/05/RA-Submission-Rural-Remote-Mental-Health.pdf>

Reserve Bank of Australia. (2020). *The Global Financial Crisis*. Retrieved from: <https://www.rba.gov.au/education/resources/explainers/pdf/the-global-financial-crisis.pdf?v=2020-02-21-14-31-06>

Rice, M. (1998). The age pension: Our unstable pillar forecasting Australian retail price inflation: A Multiple Time Series Approach - Wai-Sum. *Australian Actuarial Journal*, 2:2. Retrieved from: <https://www.actuaries.asn.au/Library/Volume%202%20-%20Issue%202%20-%201998.pdf>

Rice, M. (2018). The age pension in the 21st Century, *Financial Services Forum*, 2018
<https://www.actuaries.asn.au/Library/Events/Insights/2018/MichaelRicePaper.pdf>

Rich, J., Wright, S., & Loxton, D. (2018). Older rural women living with drought. *Local Environment*, 23(12), 1141–1155.
<https://doi.org/10.1080/13549839.2018.1532986>

Robinson, A., Burley, M., Mc Grail, M., Drysdale, M., Jones, R., Rickard, C., & Robinson, A. (2005). The conducting and reporting of rural health research: rurality and rural population issues. *Rural and Remote Health*, 5(4), 427–427. Retrieved from: <http://search.proquest.com/docview/68720838/>

Rogers, M., Barr, N., O’Callaghan, Z., Brumby, S., & Warburton, J. (2013). Healthy ageing: Farming into the twilight. *Rural Society*, 22(3), 251–262.
<https://doi.org/10.5172/rsj.2013.22.3.251>

Rooth, M. (2017). The prevalence and impact of vision and hearing loss in the elderly. *North Carolina Medical Journal*, 78(2), 118–120.
<https://doi.org/10.18043/ncm.78.2.118>

Rosen, B., & Jerdee, T. (1986). Retirement policies for the 21st century. *Human Resource Management*, 25(3), 405–420.
<https://doi.org/10.1002/hrm.3930250306>

- Rural Aid Australia (2019) *Rural Aid Australia*
Retrieved from: <https://www.ruralaid.org.au/>
- Schmälzle, M., Wetzel, M., & Huxhold, O. (2019). Pathways to retirement: Are they related to patterns of short- and long-term subjective wellbeing? *Social Science Research*, 77(214–229).
<https://doi.org/10.1016/j.ssresearch.2018.10.006>.
- Schwaba, T., & Bleidorn, W. (2019). Personality trait development across the transition to retirement. *Journal of Personality and Social Psychology*, 116(4), 651–665. <https://doi.org/10.1037/pspp0000179>
- Scott, A. (2016). *Longer careers: A game-changer for gender equality*. London Business School. March 8, 2016.
Retrieved from:
<https://www.forbes.com/sites/lbsbusinessstrategyreview/2016/03/08/longer-careers-a-game-changer-for-gender-equality/#3e2613045162>
- Services for Australian Rural and Remote Allied Health. (SARRAH). (2018). *Demography and population*. Retrieved from:
<https://sarrah.org.au/content/demography-and-population>
- Shah, A. (2011). Elderly suicide rates: a replication of cross-national comparisons and association with sex and elderly age-bands using five-year suicide data. *Journal of Injury & Violence Research*, 3(2), 80–84.
<https://doi.org/10.5249/jivr.v3i2.64>
- Shah, A., & Bhat, R. (2009). Does adversity earlier in life affect elderly suicide rates? A cross-national study. *International Journal of Psychiatry in Clinical Practice*, 13(4), 273–277. <https://doi.org/10.3109/13651500902912702>
- Shah, A., & De, T. (1998). Suicide and the elderly. *International Journal of Psychiatry in Clinical Practice*, 2(1), 3–17.
<https://doi.org/10.3109/13651509809115108>
- Schofield, D., Shrestha, R., Percival, R., Passey, M., Kelly, S., Callander, E., & Schofield, D. (2011). Economic impacts of illness in older workers: quantifying the impact of illness on income, tax revenue and government spending. *BMC Public Health*, 11(1), 418–418. <https://doi.org/10.1186/1471-2458-11-418>
- Scott, A. (2016). *Longer careers: A Game-Changer for Gender Equality*. London Business School. March 8, 2016.
Retrieved from:
<https://www.forbes.com/sites/lbsbusinessstrategyreview/2016/03/08/longer-careers-a-game-changer-for-gender-equality/#3e2613045162>
- Shah, A., & Erlangsen, A. (2014). Suicide in older people. *Crisis*, 35(6), 365–367.
<https://doi.org/10.1027/0227-5910/a000297>

- Shah, A., Zarate-Escudero, S., Bhat, R., De Leo, D., & Erlangsen, A. (2014). Suicide in centenarians: the international landscape, 26(10), 1703–1708. <https://doi.org/10.1017/S1041610214001112>
- Shah, A., Bhat, R., Zarate-Escudero, S., De Leo, D., & Erlangsen, A. (2016). Suicide rates in five-year age-bands after the age of 60 years: the international landscape †. *Ageing & Mental Health*, 20(2), 131–138. <https://doi.org/10.1080/13607863.2015.1055552>
- Shen, Y., Radford, K., Daylight, G., Cumming, R., Broe, T., Draper, B., & Shen, Y. (2018). Depression, suicidal behaviour, and mental disorders in older Aboriginal Australians. *International Journal of Environmental Research and Public Health*, 15(3). <https://doi.org/10.3390/ijerph15030447>
- Sheppard, F.H., & Stanford, D. (2019). Women's perceptions of retirement. *Journal of Gerontological Nursing*, 45(4), 31–39. <https://doi.org/10.3928/00989134-20190221-01>
- Sheppard, F.H., & Wallace, D. (2018). Women's mental health after retirement. *Journal of Psychosocial Nursing & Mental Health Services*, 56(7), 37–45. <https://doi.org/10.3928/02793695-20180619-07>
- Sheppard, F.H., & Welborn, A. (2019). Now what? The lived experience of women forced to retire and implications to health in later life. *Journal of Psychosocial Nursing & Mental Health Services*, 57(10), 12–16. <https://doi.org/10.3928/02793695-20190821-01>
- Silva, C., Ribeiro, J., & Joiner, T. (2015). Mental disorders and thwarted belongingness, perceived burdensomeness, and acquired capability for suicide. *Psychiatry Research*, 226(1), 316–327. <https://doi.org/10.1016/j.psychres.2015.01.008>
- Smith, M., Cui, R., Odom, J. V., Leys, M. J., & Fiske, A. (2020). Giving support and suicidal ideation in older adults with vision-related diagnoses. *Clinical Gerontologist*, 43(1), 17-23.
- Soldier On (2019) *Soldier On*. Retrieved from <https://soldieron.org.au/>
- Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., & Brand, H. (2012). Health literacy and public health: a systematic review and integration of definitions and models. *BMC public health*, 12(1), 80. <https://doi.org/10.1186/1471-2458-12-80>
- Sorenson, S. (1991). Suicide among the elderly: issues facing public health. *American Journal of Public Health*, 81(9), 1109–1110. <https://doi.org/10.2105/AJPH.81.9.1109>
- Stancliffe, R.J., Wilson, N.J., Gambin, N., Bigby, C., & Balandin, S. (2013). Transition to retirement. A guide to inclusive practice. Sydney University Press, Sydney, Australia.

- Stanley, I., Hom, M., Rogers, M., Hagan, C., & Joiner, T. (2016). Understanding suicide among older adults: a review of psychological and sociological theories of suicide. *Ageing & Mental Health*, 20(2), 113–122. <https://doi.org/10.1080/13607863.2015.1012045>
- Steffens, N., Cruwys, T., Haslam, C., Jetten, J., & Haslam, S. (2016). Social group memberships in retirement are associated with reduced risk of premature death: evidence from a longitudinal cohort study. *BMJ Open*, 6(2), e010164. <https://doi.org/10.1136/bmjopen-2015-010164>
- Stehlik, D., Lawrence, G., & Gray, I. (2000). Gender and drought: Experiences of Australian women in the drought of the 1990s. *Disasters*, 24(1), 38–53. <https://doi.org/10.1111/1467-7717.00130>
- Stice, B. D., & Sara Canetto, S. (2008). Older adult suicide: Perceptions of precipitants and protective factors. *Clinical Gerontologist*, 31(4), 4-30.
- Suanet, B., & Huxhold, O. (2020). Cohort Difference in Age-Related Trajectories in Network Size in Old Age: Are Networks Expanding? *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 75(1), 137–147. <https://doi.org/10.1093/geronb/gbx166>
- Szucs, A., Szanto, K., Aubry, J., & Dombrovski, A. (2018). Personality and Suicidal Behaviour in Old age: A Systematic Literature Review. *Frontiers in Psychiatry*, 9 (May), 128. <https://doi.org/10.3389/fpsyt.2018.00128>
- Tannahill, B. (2014). Retirement Planning Reviews. *Journal of Financial Service Professionals*, 68(2). Retrieved from <http://search.proquest.com/docview/1510298758/>
- Taylor, R., Page, A., Morrell, S., Harrison, J., & Carter, G. (2005). Social and Psychiatric Influences on Urban–Rural Differentials in Australian Suicide. *Suicide and Life-Threatening Behaviour*, 35(3), 277–290. <https://doi.org/10.1521/suli.2005.35.3.277>
- United Nations. (2019). Department of Economic and Social Affairs *World Mortality 2019*. United Nations, New York, 2020. Retrieved from: https://www.un.org/en/development/desa/population/publications/pdf/mortality/WMR2019/World_Mortality_2019.pdf
- Van Manen, M. (2016). *Researching lived experience: human science for an action sensitive pedagogy* (Second edition.). Abingdon, Oxon: Routledge <https://doi.org/10.4324/9781315421056>
- Van Zon, S., Reijneveld, S., Galaurchi, A., Mendes de Leon, C., Almansa, J., & Bültmann, U. (2019). Multi-morbidity and the transition out of full-time paid employment: A longitudinal analysis of the Health and Retirement Study. *The*

- Vo, K., Forder, P., Tavener, M., Rodgers, B., Banks, E., Bauman, A., & Byles, J. (2014). Retirement, age, gender and mental health: findings from the 45 and Up Study. *Ageing & Mental Health, 19*(7), 1–11. <https://doi.org/10.1080/13607863.2014.962002>
- Vrkljan, B., Montpetit, A., Naglie, G., Rapoport, M., & Mazer, B. (2019). *Interventions that support major life transitions in older adulthood: a systematic review.* *31*(3), 393–415. <https://doi.org/10.1017/S1041610218000972>
- Wadd, S., & Galvani, S. (2014). Working with older people with alcohol problems: Insight from specialist substance misuse professionals and their service users. *Social Work Education, 33*(5), 656–669. <https://doi.org/10.1080/02615479.2014.919076>
- Wand, A., Peisah, C., Draper, B., & Brodaty, H. (2018). Understanding self-harm in older people: a systematic review of qualitative studies. *Ageing & Mental Health, 22*(3), 289–298. <https://doi.org/10.1080/13607863.2017.1304522>
- Warburton, J., Cowan, S., & Bathgate, T. (2013). Building social capital among rural, older Australians through information and communication technologies: A review article. *Australasian journal on ageing, 32*(1), 8–14.
- Wildman, J., Moffatt, S., & Pearce, M. (2018). Quality of life at the retirement transition: Life course pathways in an early “baby boom” birth cohort. *Social Science & Medicine, 207*, 11–18. <https://doi.org/10.1016/j.socscimed.2018.04.011>
- Winterton, R., & Warburton, J. (2012). Ageing in the bush: The role of rural places in maintaining identity for long term rural residents and retirement migrants in north-east Victoria, Australia. *Journal of Rural Studies, 28*(4), 329–337. <https://doi.org/10.1016/j.jrurstud.2012.01.005>
- Wiseman, L., & Whiteford, G. (2009). Understanding occupational transitions: A study of older rural men’s retirement experiences. *Journal of Occupational Science, 16*(2), 104–109. <https://doi.org/10.1080/14427591.2009.9686649>
- World Health Organisation. (WHO). (2018). *Ageing and Health, Fact Sheet, 5th February 2018*. Retrieved from: <http://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
- World Health Organisation (WHO). (2015). *World Report on Ageing and Health* Retrieved from: <https://www.who.int/ageing/events/world-report-2015-launch/en/>

- World Health Organisation (WHO). (2017). *Global strategy and action plan on ageing and health*. Retrieved from: <https://www.who.int/ageing/WHO-GSAP-2017.pdf>
- World Health Organisation. WHO. (2014a). *Preventing suicide. A global perspective*. ISBN 978 92 4 156477 9. Retrieved from: https://www.who.int/mental_health/suicide-prevention/world_report_2014/en/
- World Health Organisation. (WHO). (2014b) *Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s*. Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/134014/9789241507691_eng.pdf?sequence=1&isAllowed=y
- World Health Organisation. (WHO). (2013). *Mental Health Action Plan 2013 – 2020*. Retrieved from: http://www.who.int/mental_health/publications/action_plan/en/
- World Health Organisation (WHO). (2002). *Active Ageing: A Policy Framework*. A contribution of the World Health Organisation to the second United Nations World Assembly on ageing, Madrid, Spain, April 2002. Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/67215/WHO_NMH_NPH_02_8.pdf;jsessionid=4EC27FCC37B4EEAEA26E598816BFE2F0?sequence=1
- Wythes, A., Lyons, M., & Wythes, A. (2006). Leaving the land: an exploratory study of retirement for a small group of Australian men. *Rural and Remote Health*, 6(3), 531–531. Retrieved from <http://search.proquest.com/docview/68604118/>
- Yeung, D. (2018). Adjustment to retirement: effects of resource change on physical and psychological wellbeing. *European Journal of Ageing*, 15(3), 301–309. <https://doi.org/10.1007/s10433-017-0440-5>
- Yiengprugsawan, V., Byles, J., Healy, J., & Kendig, H. (2016) Population ageing and NDSs. In *Health system responses to population ageing and non-communicable diseases in Asia*. Asia Pacific observatory on health systems and policies. *Comparative Country Studies*, 2 (2) Retrieved from: <https://apps.who.int/iris/handle/10665/252738>
- Yates, I. (2015). *Mental health reforms welcome but fail to address the needs of older people*. Council on the Ageing. Retrieved from: <https://www.cota.org.au/news-items/mental-health-reforms-welcome-fail-address-needs-older-people/>
- Zhu, R. (2016). Retirement and its consequences for women's health in Australia. *Social Science & Medicine*, 163, 117–125. <https://doi.org/10.1016/j.socscimed.2016.04.003>

List of Appendices

Appendix 1 National Ethics Approval Form – H12022

Appendix 2 Newspaper Advertisement

Appendix 3 Participant Information Sheet

Appendix 4 Informed Consent Form

Appendix 5 Demographic Information

Appendix 6 Interview Schedule

Appendix 7 Screening Questions

Appendix 8 Safety Protocol

Appendix 9 Factors influencing suicide in older rural males: a review of Australian studies

Appendix 1 National Ethics Approval Form – H12022

Locked Bag 1797
Penrith NSW 2751 Australia
Research Engagement, Development and Innovation (REDI)



**WESTERN SYDNEY
UNIVERSITY**

REDI Reference: H12022
Risk Rating: High

HUMAN RESEARCH ETHICS COMMITTEE

26 June 2017

Professor Andrew Page
Centre for Health Research

Dear Andrew,

I wish to formally advise you that the Human Research Ethics Committee has approved your research proposal H12022 "Retirement Pathways, Mental well-being and Suicidal Behaviours in older Rural Australians", until 30 December 2019 with the provision of a progress report annually if over 12 months and a final report on completion.

In providing this approval the HREC determined that the proposal meets the requirements of the National Statement on Ethical Conduct in Human Research.

This protocol covers the following researchers:

Andrew Page, Leigh Wilson, Kylie Crnek-Georgeson

Conditions of Approval

1. A progress report will be due annually on the anniversary of the approval date.
2. A final report will be due at the expiration of the approval period.
3. Any amendments to the project must be approved by the Human Research Ethics Committee prior to being implemented. Amendments must be requested using the HREC Amendment Request Form:
https://www.westernsydney.edu.au/data/assets/word_doc/0012/1096995/FORM_Amendment_Request.docx
4. Any serious or unexpected adverse events on participants must be reported to the Human Research Ethics Committee via the Human Ethics Officer as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the Committee as a matter of priority
6. Consent forms are to be retained within the archives of the School or Research Institute and made available to the Committee upon request.
7. Project specific conditions:
There are no specific conditions applicable.

Please quote the registration number and title as indicated above in the subject line on all future correspondence related to this project. All correspondence should be sent to the e-mail address humanethics@westernsydney.edu.au as this e-mail address is closely monitored.

Yours sincerely

Professor Elizabeth Deane
Presiding Member,
Western Sydney University Human Research Ethics Committee

Appendix 2 Newspaper Advertisement



Are you aged over 45 years of age and living in rural New South Wales and either working or retired?

If so, you may be eligible to participate in a research study investigating retirement transitions for older rural Australians. If you identify with any of the groups below, and are interested in discussing your experience, please contact the researcher, whose details are listed below.

RESEARCH STUDY TITLE

Retirement pathways, mental well-being and suicidal behaviours in older rural Australians.

Group 1- NOK (Next of Kin) – Lived Experience (has had a family member die by suicide in the last 10 years, who was either working or retired and over 45 years of age)

Group 2- Lived Experience (has had lived experience of suicide and is either retired or working and over 45 years of age)

Group 3 – Retired or working (has not had any lived experience of suicide, either themselves or through the loss of a family member, and is over 45 years of age).

For further details or to register your interest or to participate please telephone or email Kylie Crnek-Georges on:

Email: k.crnek-georges@westernsydney.edu.au

Phone: (02) 46203628 (Please leave a message if unattended).

This study has been approved by the Western Sydney University's Ethics Committee,
Approval number H12022

Appendix 3 Participant Information Sheet



Participant Information Sheet Project

Title

“Retirement pathways, mental well-being and suicidal behaviour in older rural Australians”.

Project Summary: This study will investigate the role of employment, and changes in employment, on mental well-being and suicidal behaviour in older rural adults. This study aims to develop a detailed understanding of the experience of work and retirement in rural communities and how it relates to mental health, in order to better inform mental health services and suicide prevention for families and communities. This research project will highlight the personal, lived experience of a group of older Australians, in order to understand how experiences of work and retirement in rural communities might affect mental wellbeing and suicidal behaviour, and, in turn, use this information to recommend changes for policy and services relating to mental health and suicide prevention.

You are invited to participate in a research study being conducted by Kylie Crnek-Georgeson, Researcher for the Centre for Health Research, Western Sydney University under the Supervision of Professor Andrew Page, Chair of Epidemiology, Centre for Health Research, Western Sydney University, and Associate Professor Leigh Wilson, Director of Academic Programing, Public Health and Health Science, School of Health Science, Western Sydney University.

- a) Group 1- NOK (Next of Kin) – Lived Experience (has had a family member die by suicide in the last 10 years, who was either working or retired and over 45 years of age)

This group is to be interviewed to discuss the employment and/or retirement trajectory of the person who died by suicide.

- b) Group 2- Lived Experience(has had lived experience of suicide and is either retired or working and over 45 years of age)

This group is to be interviewed to discuss the employment and/or retirement trajectory of the person who died by suicide.

- c) Group 3 – Retired or working (has not had any lived experience of suicide, either themselves or through the loss of a family member, and is over 45 years of age).

The aim of interviewing this group of people is to analyse the employment and/or retirement trajectory of the participant who has not had any experience of suicide, either themselves or from the loss of a family member, in order to capture employment or retirement experiences

How is the study being paid for? This study is being funded by Western Sydney University as part of the Researcher's PhD studies.

What will I be asked to do?

You will be asked to read this Information Sheet, and if you are interested in learning more about the project, please contact the Researcher, Kylie Crnek-Georgeson, by phone, email or by post.

If you decide to participate in the study, you will need to contact Kylie so she can discuss the project with you, and give you an idea as to what the interview will involve, such as where the interviews can take place and the types of questions you will be asked. If you are interested in participating in this study, you will be sent out a Consent form to read over, sign and send back to the Researcher. (You will be given a reply paid envelope). Once received by the Researcher, she will contact you by phone to arrange an interview time and place that is suitable to you both. A few days after this phone call, you will receive a confirmation letter in the mail, stating where and when the interview will take place. You can change this time and date if you need to.

How much of my time will I need to give?

Interviews will take between 45 minutes and one and a half hours of your time.

What benefits will I, and/or the broader community, receive for participating?

The research will benefit the wider community by providing information on retirement transitions in rural communities that can be used to inform rural mental health services and suicide prevention activity, and policy responses to rural economic adjustment in older age people. This research will also attempt to address the gap in research that is associated with older rural Australians and their experiences of retirement, and the potential impact on mental health and suicidal behaviour (particularly in older rural Australians).

Will the study involve any risk or discomfort for me? If so, what will be done to rectify it?

The researchers acknowledge that the discussion of your experiences may be distressing. We suggest that before you decide to participate in this project, that it may be appropriate to discuss this project with your family or health professional. If you choose to participate in the study, you can withdraw at any time throughout the course of either the recruitment or interview phase, and we are able to offer you additional local support information for you to contact.

How do you intend to publish or disseminate the results?

It is anticipated that the results of this research project will be published and/or presented in a variety of forums, such as conferences, forums, academic publications. In any publication and/or presentation, information will be provided in such a way that the participant cannot be identified, except with your permission...

Will the data and information that I have provided be disposed of?

Identifying information, contained in the master linkage key for the study (Participant ID and study ID number), will be coded electronically, and stored in a password protected file in a secure computer network at Western Sydney University,

University of Western Sydney
ABN 53 014 069 881 CRICOS Provider No: 00917K
Locked Bag 1797 Penrith NSW 2751 Australia
westernsydney.edu.au

The final coded, linked and scored information will be stored as a password protected de-identified computer file, stored on the Western Sydney computer network for 15 years in accordance with the National Health and Medical Research Council Research guidelines, under the Australian Code For The Responsible Conduct Of Research.

Can I withdraw from the study?

Participation is entirely voluntary, and you are not obliged to be involved. If you do participate you can withdraw at any time without giving a reason. If you choose to withdraw from the study, you will need to contact the researcher in writing, either by email or postal letter, and you will receive written confirmation that you have withdrawn from the study.

Can I tell other people about the study?

Yes, you can tell other people about the study by providing the Researcher's details, below, to discuss their participation in the research project and obtain a copy of the information sheet

What if I require further information?

Please contact Kylie Crnek-Georgeson should you wish to discuss anything about the research or have any further questions.

Kylie Crnek-Georgeson- Researcher

Email: k.crnek-georgeson@westernsydney.edu.au

Phone- (02)46203628

Physical address - Building 3, Centre for Health Research, Campbelltown Campus, Gilchrist Drive, Campbelltown, NSW. 2560

Mailing address- Western Sydney University,

Centre for Health Research, Campbelltown Campus, Locked bag 1797, Penrith, NSW. 2751

What if I have a complaint?

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through Research Engagement, Development and Innovation (REDI) on Tel +61 2 4736 0229 or email humanethics@westernsydney.edu.au.

Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

If you agree to participate in this study, you will be asked to sign the Participant Consent Form. The information sheet is for you to keep and the consent form is retained by the researcher/s.

This study has been approved by the Western Sydney University Human Research Ethics Committee.

The Approval number is [H12022].

University of Western Sydney
ABN 53 014 069 881 CRICOS Provider No: 00917K
Locked Bag 1797 Penrith NSW 2751 Australia
westernsydney.edu.au

Appendix 4 Informed Consent Form



Consent Form

Project Title

“Retirement pathways, mental well-being and suicidal behaviour in older rural Australians”.

Group 1- NOK (Next of Kin) – Lived Experience (Has had a family member die by suicide in the last 10 years, who was either working or retired and over 45 years of age)

Group 2- Lived Experience (Has had lived experience of suicide and is either retired or working and over 45 years of age)

Group 3 – Retired or working (Has not had any lived experience of suicide, either themselves or through the loss of a family member and is over 45 years of age).

I hereby consent to participate in the above named research project.

I acknowledge that:

- I have read the participant information sheet (or where appropriate, have had it read to me) and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s
- The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I consent to:

- ☐ *Participating in an interview*
- ☐ *Having my information audio recorded*

I consent for my data and information provided to be used for this project.

I understand that my involvement and information gained during the study may be published. I understand that information about me will be de-identified and my identity will not be revealed.

I understand that my participation in this study will have no effect on my relationship with the researcher/s, and any organisations involved, now or in the future. I understand that I will be unable to withdraw my data and information from this project unless I request this in writing to the Chief Investigator.

Signed:

Name:

Date:

Return address:

Western Sydney University

School of Medicine,

Building 3, The Health Research Institute,

Attention: Kylie Crnek-Georgeson

Campbelltown Campus, Locked bag 1797, Penrith, NSW. 2751

This study has been approved by the Human Research Ethics Committee at Western Sydney University. The ethics reference number is: H12022

What if I have a complaint?

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through Research Engagement, Development and Innovation (REDI) on Tel +61 2 4736 0229 or email humanethics@westernsydney.edu.au.

Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

Appendix 5 Demographic Information

Demographic Information

Interviewee _____

1.Can you please tell me your age? _____

2.What is your sex? _____

3.What is your postcode? _____

4.How many people live in your household? _____

5.Are you retired? Yes, for how long? _____

6.No, when are you looking at retiring? _____

7.Are you taking any medications? IF yes, can you please tell me what they are?

Appendix 6 Interview Schedule

Interview Schedule

The researcher will introduce themselves to the participant:

‘Hello, my name is Kylie and I am a Researcher from Western Sydney University.

Firstly, thank you very much for giving up your time to talk to us today and I am sure you are aware that we are interested in your views about retirement pathways and mental well-being.

Participants will then be provided with the participant information sheet and previously signed consent form. The researcher will go through the participant information sheet and consent form with the participant and address any concerns the participant may have. The researcher will give the phone numbers of local suicide support services to the participant before starting the interview and remind the participant that the interview can be stopped at any time.

Researchers will specifically remind participants:

‘This interview is completely voluntary and confidential. This is so we can make sure all details are accurately recorded and we do not miss any of your comments. Do you have any objections to the interview being recorded? [Researchers to wait for response – if the participant is uncomfortable with the audio recording, the tape recorder will be turned off and researchers will take notes]. If you wish to stop the interview at any time, please feel free to let me know. You may withdraw from the interview at any time before or after the interview and your audio recording or notes will be excluded. Do you have any questions?’

If participants do not have any further questions the researcher will begin the interview.

The Researcher will then begin to go through the set questions (see Interview Questions)

Depending upon the response of the participant, researchers can probe in areas such as the participant’s employment history, general health and any additional relevant questions for those who are next of kin and those who have lived experience of suicide.

Responses of participants will be integrated within the probes.

Finally, all participants will be thanked for their time and advised of the contact details of the researchers, as per the participant information sheet.

Appendix 7 Screening Questions

Group 1 –NOK (Next of Kin) Lived experience of suicide – (family member was over 45 years of age)

1. Have you had a person, close to you, i.e. your son, daughter, husband, wife, partner, die by suicide in the last 5 -10 years?
2. Was that person over 45 years of age?
3. Do you live in rural New South Wales?
4. Are you interested in participating in this study?
5. Would you like more information on the study? Address/Email
6. What is your first name and do you live in the Riverina area of NSW?
7. So that you are being looked after, would you mind if I asked you a few questions pertaining to the event?
8. When was the event?
9. What are your coping mechanisms to help you to stay mentally well?
10. Are you or have you been under the care of a treating mental health professional (If yes, ask the next question, if no, the participant is not eligible for the study)
11. May I suggest that you make an appointment with your G.P., Case Manager or your local Counsellor directly after our interview, so you can debrief with him or her in order to discuss any issues that may arise after the interview.
12. Do you feel comfortable talking to me about your experience of suicide (If yes, ask the next question, if no, participant is not eligible for participating in the project).
13. Where would you like to be interviewed? Home/Community Centre/ Other
14. Do you have any questions that you would like to ask me?

Group 2 - Lived experience of suicide, retired or working, over 45 years of age

1. Are you a person who has a lived experience of suicide?
2. Are you over 45 years of age?
3. Do you live in rural New South Wales?
4. Are you interested in participating in this study?
5. Would you like more information on the study? Address/Email
6. What is your first name, and do you live in the Riverina area of NSW?
7. So that you are being looked after, would you mind if I asked you a few questions pertaining to the event?
8. When was the event?
9. What are your coping mechanisms to help you to stay mentally well?
10. Are you, or have you been under the care of a treating mental health professional (If yes, ask the next question, if no, the participant is not eligible for the study)
11. May I suggest that you make an appointment with your G.P., Case Manager or your local Counsellor directly after our interview, so you can debrief with him or her in order to discuss any issues that may arise after the interview.
12. Do you feel comfortable talking to me about your experience of suicide (If yes, ask the next question, if no, participant is not eligible for participating in the project).
13. Where would you like to be interviewed? Home/Community Centre/ Other
14. Do you have any questions that you would like to ask me?

Group 3 - Retired or working, over the age of 45 years

1. Are you retired or working?
2. Are you over the age of 45 years old?
3. Do you live in rural New South Wales?
4. Are you interested in participating in this study?
5. Would you like more information on the study? Address/Email
6. What is your first name and do you live in the Riverina area of NSW?
7. Where would you like to be interviewed? Home/Community Centre/Other
8. Do you have any questions that you would like to ask me?

Appendix 8 Safety Protocol

Safety Protocol

Project Title: Retirement pathways, mental well-being and suicidal behaviour in older Rural Australians.

(Western Sydney University's Ethics Committee, Approval number H12022)

Physical Risk Strategy

Participant's home - The Researcher will travel in her own comprehensively insured vehicle with a travelling companion, who is over the age of 18 years. The travelling companion will remain in the car or in the front room of the home. The travelling companion will not be involved in the interview process.

The Researcher will carry a mobile phone at all times and will text Supervisor upon arrival to the home and text upon finishing the interview and leaving the designated interview area (House, Community centre, other) .

If the Researcher arrives at the house and is not able to gain access, or if the Researcher feels unsafe at any time approaching the house, the Researcher will leave the house and arrange for the meeting to be held at another location.

It is proposed that the interview will be completed at a time and place convenient to the participant. This may be a participant's home, a private room in a community centre, or at another mutually agreeable location. It is important that the participant is able to nominate where they will feel comfortable in order to be able to answer the study questions.

Emotional Risk Strategy

The Researcher will arrange regular meetings with her Supervisors to discuss any concerns that the researcher has, either face to face or via a Zoom meeting. In addition to this, the Researcher will monitor her journey, using a Research journal, in order to document and reflect.

The Researcher will meet with Western Sydney University's Student counsellor on a regular basis, either face to face when on campus, or via Zoom when travelling, in order to provide feedback and support for other interviews and to provide psychological support for the Researcher. The Researcher intends to participate in debriefing sessions (at least once per month) with the Western Sydney University's counsellors via Zoom or face to face meetings, depending on the Researcher and counsellors availability.

The Researcher is going to use journal writing as a way of debriefing, and recording patterns, reflections, note taking, organisation, and will liaise and seek support from Suicide Prevention Australia's Lived Experience Network representatives.

We agree to the conditions of this risk assessment / safety protocol



Supervisor



PhD Researcher

Kylie Krack
Georgese

Appendix 9 Factors influencing suicide in older rural males: a review of Australian studies



REVIEW ARTICLE

Factors influencing suicide in older rural males: a review of Australian studies

KT Crnek-Georgeson, LA Wilson, A Page
Western Sydney University, Campbelltown, NSW, Australia

Submitted: 19 May 2016; Revised: 2 May 2017, Accepted: 16 May 2017; Published: 15 October 2017 Crnek-Georgeson KT, Wilson LA, Page A

Factors influencing suicide in older rural males: a review of Australian studies Rural and Remote Health 17: 4020. (Online) 2017

Available: <http://www.rrh.org.au>

ABSTRACT

Introduction: Suicide remains an important public health issue in Australia, responsible for around 2500 deaths each year. Although suicide only accounts for around 1.7% of total mortality in Australia per year, 75% of suicide deaths are in males. This article reviews the factors contributing to suicide in older rural males in Australia and then categorises the papers into themes for ease of explanation. Living with experiences of drought, dramatic weather change, lower employment opportunities, out-migration, changing family dynamics, ageism in the community, economic change and competitive labour markets, all add to the diverse experience for an older person who is ageing in a rural setting.

Methods: A literature search was conducted in March 2015, using the terms 'elderly' and 'older males' and then combined with 'rural', 'suicide' and 'Australia', to investigate the amount of research that has been conducted on the factors relating to suicide in older rural Australian males.

Results: Reviewed articles consisted of research using either quantitative or qualitative approaches, which investigated suicide in older Australians published between 1950 and 2014. With strict adherence to the selection criteria, articles (21 in total) were removed because they were a literature review; a narrative review; they focused predominantly on youth or suicide risk, suicidal ideation or suicide attempts; or they discussed reasons for living. This article discusses the researcher's recommendations for further research into employment transitions for older Australian males, and the need to review policy change for further intervention in the future.

Conclusions: This article highlights factors that may cause older rural Australians to be placed at a higher risk of suicide than their urban-dwelling counterparts. With the impact of the changing economy, unpredictable climatic conditions and